

Алматы (7273)495-231  
Ангарск (3956)60-70-56  
Архангельск (8182)63-90-72  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Благовещенск (4162)22-76-07  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Владикавказ (8672)28-90-48  
Владимир (4922) 49-43-18  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89

Ижевск (3412)26-03-58  
Иваново (4932)77-34-06  
Иркутск (395)279-98-46  
Казань (843)206-01-48  
Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Коломна (4966)23-41-49  
Кострома (4942)77-07-48  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Курган (3522)50-90-47  
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижний Новгород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Ноябрьск (3496)41-32-12  
Новосибирск (383)227-86-73  
Ноябрьск (3496)41-32-12  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Петрозаводск (8142)55-98-37  
Псков (8112)59-10-37

Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Саранск (8342)22-96-24  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Сыктывкар (8212)25-95-17  
Сургут (3462)77-98-35  
Тамбов (4752)50-40-97

Тверь (4822)63-31-35  
Тольяти (8482)63-91-07  
Томск (3822)98-41-53  
Тула (4872)33-79-87  
Тюмень (3452)66-21-18  
Улан-Удэ (3012)59-97-51  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Чебоксары (8352)28-53-07  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Чита (3022)38-34-83  
Якутск (4112)23-90-97  
Ярославль (4852)69-52-93

Киргизия (996)312-96-26-47

Россия (495)268-04-70

Казахстан (772)734-952-31

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## КАТАЛОГ



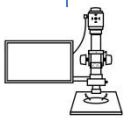


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# A11.1123

## Student Biological Microscope, Binocular Head, Dual LED Light

**OPTO-EDU**

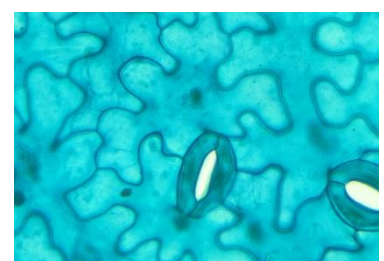
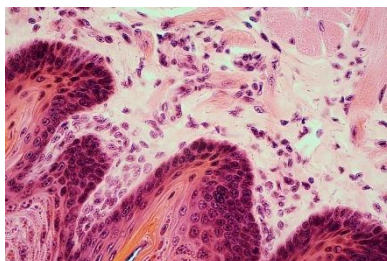
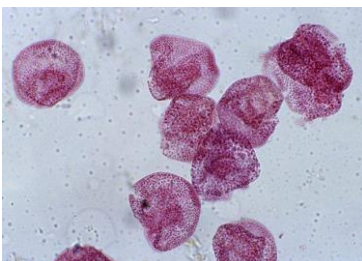


Dual LED Light, Up/Bottom Illumination, Brightness Adjustable

- Total 40x~400x Magnification
- Dual Up & Bottom LED Light Source
- Cordless Powered by AA 1.5V Battery 3 pcs
- Plain Stage 90x90mm With Clip & Disc Diaphragm
- Compact All in One Design for Easy Moving

### A11.1123 Economical Binocular Biological Microscope

Head	Sliding Binocular Head, 45°Inclined, 360°Rotatable
Eyepiece	WF10x 2 pcs, 1pc With Pointer
Nosepiece	Quadruple Revolving Nosepiece
Objective	Achromatic 4x,10x,40x(Spring),100x(Spring,Oil)
Working Stage	Double Layers Mechanical Stage 100x90mm, Moving Range 30x60mm
Condenser	Abbe Condenser N.A1.25 With Iris Diaphragm
Focusing	Coaxial Coarse And Fine Focusing Knobs
Illumination	Dual LED Light, Up/Bottom Illumination, Brightness Adjustable
Power Supply	By External AC/DC Adaptor
	By 3xAA Rechargeable Batteries (If Shipped By Air, Battery Will NOT Be Included)



# A11.1124

## Student Biological Microscope, Cordless Dual Light, Plastic Body

**OPTO-EDU**



### 05 LIGHT SOURCE

Dual light source, with top and bottom LED light.  
Powered by 3 AA batteries for cordless usage.



Economical Binocular & Dual LED Biological Microscope  
Binocular Head 45° Inclined, 360° Rotatable Both Eyetube Diopter Adjustable  
Eyepiece WF10x/18mm, Achromatic Objective 4x,10x,40x,100x Spring  
Double Layers Mechanical Stage 100x90mm, Moving Range 30x60mm  
Dual LED Light, Up/Bottom Illumination, Brightness Adjustable

### A11.1124 Student Microscope, Cordless Dual Light, Plastic Body

Head	Monocular Head, 360° Rotatable
Eyepiece	WF10x/16mm
Objective	Achromatic 4x,10x,40x(Spring)
Nosepiece	Triple Revolving Nosepiece
Working Stage	Plan Stage With Clips, 90x90mm
Condenser	Single Lens Condenser, With 6 Holes Disc Diaphragm
Focusing	Coarse Focusing Knob
Illumination	Dual Light Top & Bottom LED Light
Power	Cordless Powered By AA 1.5V Battery 3 pcs
Note	Order Shipped By Air Will NOT Include Batteries





# A11.1133

## Student Biological Microscope

**OPTO-EDU**



A11.1133-A



A11.1133-B



A11.1133-C



Total Magnification 40x-1000x, Up To 40x-2500x With Optional Eyepieces  
 Monocular, Binocular, Trinocular Heads Available For Photo Video Capture  
 Achromatic Objective 4x, 10x, 40x, 100x On 4 Holes Nosepiece  
 Single Layer Stage 100x90mm, With Vernial Moving Scale  
 Light Source 6V20W Halogen Lamp, or LED 1W Optional

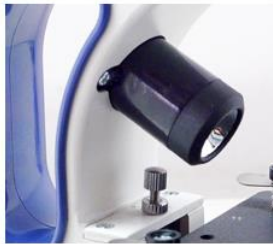
### Product Specification

Items	A11.1133 Biological Microscope Specification	A	B	C	D
Head	Monocular Head, 30° Inclined, 360° Rotatable	•	•		
	Sliding Binocular Head, 45° Inclined, 360° Rotatable			•	
	Seidentopf Binocular Head, 30° Inclined, 360° Rotatable				•
Eyepiece	WF10X With Pointer	•	•	•	•
	Achromatic 4X	•	•	•	•
	Achromatic 10X	•	•	•	•
	Achromatic 40X, Spring	•	•	•	•
Nosepiece	Achromatic 100X, Spring/Oil		•	•	•
	Triple Revolving Nosepiece	•			
Stage	Quadruple Revolving Nosepiece		•	•	•
	Plain Stage With Clips, Size 100x90mm	•			
	Attachable Mechanical Stage, Size 100x90mm		•	•	
Condenser	Double Layer Mechanical Stage, Size 100x90mm				•
	Single Lens Condenser With Disc Diaphragm	•			
Focusing	N.A.1.25 Condensor With Iris Diaphragm		•	•	•
	Coaxial Coarse And Fine Focusing Knobs	•	•	•	•
Light Source	LED Lampe With Rechargeable Battery	•	•	•	•
	Power Supply Adapter	•	•	•	•

# A11.1143

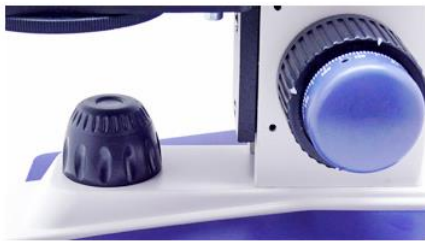
## Student Biological Microscope, Monocular, Dual LED Light

**OPTO-EDU**



### 05 LIGHT SOURCE

Dual light source, with upper LED, and bottom LED brightness adjustable. Powered by external main adapter, or 3 AA batteries for cordless usage.



Economical Monocular & Dual LED Biological Microscope  
 Monocular Head 45° Inclined, 360° Rotatable  
 Eyepiece WF10x/18mm, Achromatic Objective 4x,10x,40x Spring  
 Plan Stage With Clips 95x95mm  
 Dual LED Light, Up/Bottom Illumination, Brightness Adjustable

### A11.1143 Student Microscope

Head	Monocular Head, 45°Inclined, 360°Rotatable
Eyepiece	WF10x
Nosepiece	Triple Revolving Nosepiece
Objective	Achromatic 4x,10x,40x(Spring)
Working Stage	Plan Stage With Clips, 95x95mm
Condensor	Single Lens Condenser, With Disc Diaphragm
Focusing	Coaxial Coarse And Fine Focusing Knobs
Light Source	Dual LED Light, Up/Bottom Illumination, Brightness Adjustable
Power Supply	By External AC/DC Adaptor,Or By 3xAA Batteries (Not Included)





# A11.1303

## Biological Microscope

OPTO-EDU



Monocular, S Teaching, V Teaching, Binocular & Trinocular Head Optional  
 WF10x/18mm Wide Field Eyepiece  
 Backward Quadruple Nosepiece  
 Achromatic Objective 4x, 10x, 40x, 100x  
 Double Layer Mechanical Stage 125x130/60x30mm

A11.1303 Biological Microscope		M	S	V	B	T
Head	Monocular Head, 45° Inclined, 360° Rotatable	•				
	Seidentopf Binocular Head, 45° Inclined, 360° Rotatable				•	
	Seidentopf Trinocular Head, 45° Inclined, 360° Rotatable					•
	V Dual Viewing Head, 30°+90° Inclined, 360° Rotatable			•		
	S Dual Viewing Head, 45°+45° Inclined, 360° Rotatable		•			
Eyepiece	WF10x/18mm	•	•	•	•	•
	Achromatic 4x	•	•	•	•	•
Objective	Achromatic 10x	•	•	•	•	•
	Achromatic 40x(S)	•	•	•	•	•
	Achromatic 100x(S,Oil)	•	•	•	•	•
	Quadruple Revolving Nosepiece	•	•	•	•	•
Stage	Double Layers Mechanical Stage 125x130mm/ 60x30mm	•	•	•	•	•
Condenser	Abbe Condenser N.A.1.25, Φ2-Φ30mm Iris Diaphragm, With Φ32 Filter Holder	•	•	•	•	•
Focusing	Coaxial Coarse & Fine Focusing Adjustable, Focusing Range 20mm	•	•	•	•	•
Light Source	Halogen 6V/20W, Brightness Adjustable	•	•	•	•	•
Adapter	Eyepiece Adapter					•
	1x C-mount					•
Optional Accessory						
Light Source	LED 1W, Brightness Adjustable					

# A11.1313

## Biological Microscope

**OPTO-EDU**



Total Magnification 40x-1000x, Up To 40x-2500x With Optional Eyepieces  
 Monocular, Dual View, Binocular, Trinocular Heads Available For Photo Video Capture  
 Achromatic Objective 4x, 10x, 40x, 100x On 4 Holes Nosepiece  
 Double Layer Mechanical Stage 125x130mm, Moving Range 30x60mm  
 Light Source 6V20W Halogen Lamp, or LED 1W Optional

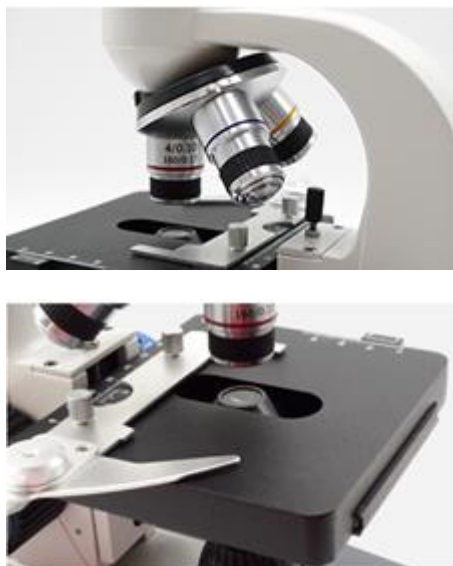
A11.1313 Biological Microscope		M	S	V	B	T
Head	Monocular Head, 45° Inclined, 360° Rotatable	•				
	Dual Observation Head, 45°+45° Inclined		•			
	Dual Observation Head, 30°+90° Inclined			•		
	Seidentopf Binocular Head, 30° Inclined, 360° Rotatable, Interpupillary Distance 55-75mm				•	
	Seidentopf Trinocular Head, 30° Inclined, 360° Rotatable, Interpupillary Distance 55-75mm					•
Eyepiece	WF10x/18mm	•	•	•	•	•
Objective	Achromatic 4x	•	•	•	•	•
	Achromatic 10x	•	•	•	•	•
	Achromatic 40x(S)	•	•	•	•	•
	Achromatic 100x(S,Oil)	•	•	•	•	•
Nosepiece	Quadruple Revolving Nosepiece	•	•	•	•	•
Stage	Double Layers Mechanical Stage 125x130mm/60x30mm	•	•	•	•	•
Condenser	Abbe Condenser N.A.1.25, Φ2-Φ30mm Iris Diaphragm, With Filter Holder & Blue Filter Φ32	•	•	•	•	•
Focusing	Coarse & Fine Focusing Knob, Range 20mm, Scale 0.01mm	•	•	•	•	•
Light Source	Halogen Lamp 6V/20W	•	•	•	•	•
Optional Accessories						
Light Source	LED Lamp 1W					
Eyepiece	WF15x					A51.1303-15
	WF16x					A51.1303-16
	WF20x					A51.1303-20
	WF25x					A51.1303-25



# A11.1324

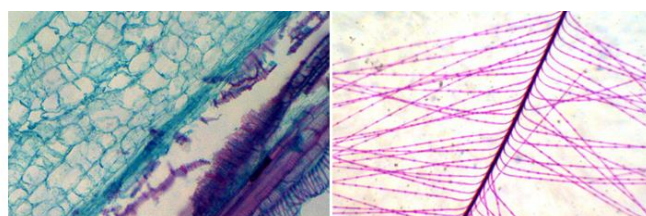
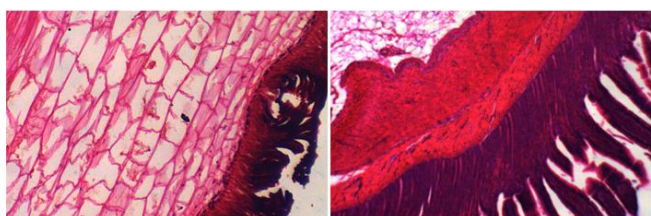
## Student Biological Microscope

**OPTO-EDU**



Monocular Head Inclined 45° Rotatable 360°  
 Eyepiece WF10x/18mm, Achromatic Objective 4x,10x,40x Spring  
 Double Layers Mechanical Stage With Iris Diaphragm Condenser  
 Coaxial Coarse & Fine Focusing Knob,  
 LED Light Powered By External AC/DC Adaptor, Or By 3xAA Batteries

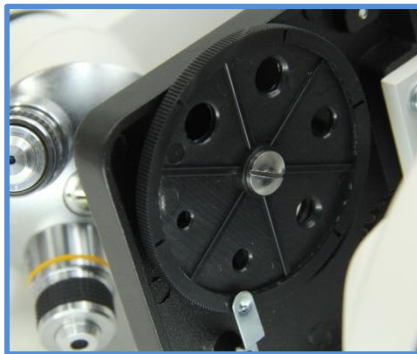
A11.1324 Student Microscope	
Head	Monocular Head, 45° Inclined, 360° Rotatable
Eyepiece	WF10x
Objective	Achromatic 4x,10x,40x(Spring)
Nosepiece	Triple Revolving Nosepiece
Stage	Double Layers Mechanical Stage 90x90mm, Moving Range 30x60mm
Condenser	Abbe Condenser N.A.0.65 With Iris Diaphragm
Focusing	Coaxial Coarse & Fine Focusing Adjustment, With Safty Stop
Light Source	LED Light, Brightness Adjustable
Power Supply	By External AC/DC Adaptor, Or By 3xAA Batteries(Not Included)
Size	16x11x31cm, Net Weight 1.9Kg



# A11.1321

## Student Biological Microscope

**OPTO-EDU**



Classical & Popular Student Microscope Model In Amazon Market  
 Monocular Head 45° Inclined, 360° Rotatable  
 Eyepiece WF10x/18mm, Achromatic Objective 4x,10x,40x Spring  
 Plan Stage With Clips 90x90mm  
 LED Light For Bottom Transmit Illumination

### A11.1321 Student Biological Microscope

Head	Monocular Head, 360° Rotatable
Eyepiece	WF10x
Objective	Achromatic 4x,10x,40x
Nosepiece	Backward Triple Revolving Nosepiece
Stage	Clip Stage With Disc Diaphragm
Focusing	Coaxial Coarse & Fine Focusing Knob
Illumination	LED Light
Power Supply	External Transformer, 3xAA Battery Available



Achromatic Objectives 4x, 10x, 40x



# A11.1322

## Student Biological Microscope, Binocular, Dual LED Light

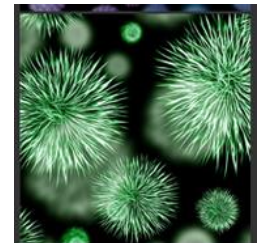
**OPTO-EDU**



Classical & Popular Student Microscope Model In Amazon Market  
Binocular Head 45° Inclined, 360° Rotatable  
Eyepiece WF10x/18mm, Achromatic Objective 4x,10x,40x Spring  
Plan Stage With Vernial Scale, 90x90mm, Moving Range 30x50mm  
Dual LED For Up/Bottom Illumination

### A11.1322 Student Biological Microscope

Head	Binocular Head, 360° Rotatable
Eyepiece	WF10x
Objective	Achromatic 4x,10x,40x(Spring)
Nosepiece	Backward Triple Revolving Nosepiece
Working Stage	Plan Stage With Vernial Scale, 90x90mm, Moving Range 30x50mm
Condenser	Single Lens Condenser, With 6 Holes Disc Diaphragm
Focusing	Coaxial Coarse & Fine Focusing Knob, With Safty Stop
Illumination	Dual LED Light, Up/Bottom Illumination, Brightness Adjustable
Power Supply	By External AC/DC Adaptor,Or By 3xAA Batteries (Not Included)



# A11.1326

## Student Biological Microscope, Round Stage

**OPTO-EDU**



Full Metal High Rigidity Body Total Magnification 40x~400x  
Fast Moving Round Rotatable Working Stage Dia. 90mm  
Single Lens Condenser, With 6-Holes Disc Diaphragm  
Transmit & Reflect LED Light Source, Both Brightness Adjustable  
Cordless 2xAA Batteries And External Adapter AC100~240V

## Products Specification

### A11.1326 Student Microscope Specification

Head	Monocular Head, 45° Incline, 360° Rotatable
Eyepiece	WF10x
Objective	Achromatic 4x, 10x, 40x
Nosepiece	Triple Revolving Nosepiece
Focusing	Coarse Focusing Knob, Focusing Range 13mm
Working Stage	Fast Moving Round Rotatable Working Stage Dia. 90mm
Condenser	Single Lens Condenser, With 6-Holes Disc Diaphragm
Light Source	Transmit & Reflect LED Light Source, Both Brightness Adjustable
Power	Cordless 2xAA Batteries And External Adapter AC100~240V
Size	29x16x16cm



# A12.1303

## Laboratory Microscope

**OPTO-EDU**



Total Magnification 40x-1000x, Up To 40x-2500x With Optional Eyepieces  
 Monocular, Dual View, Binocular, Trinocular Heads Available For Photo Video Capture  
 Achromatic Objective 4x, 10x, 40x, 100x On 4 Holes Nosepiece  
 Double Layer Mechanical Stage 125x125mm, Moving Range 40x50mm  
 Transmit Light Source LED Brightness Adjustable

A12.1303 Biological Microscope		M	V	S	B	T
Head	Monocular Head, 30° Inclined	o				
	Seidentopf Binocular Head, 30° Inclined, Interpupillary Distance 55~75mm				o	
	Seidentopf Trinocular Head, 30° Inclined, Interpupillary Distance 50~75mm, With Digital Eyepiece Adapter, Height Adjustable					o
	Dual Observation Head, 30° Inclined / Vertical		o			
	Dual Observation Head, 45° Inclined			o		
Eyepiece	WF10x					
Nosepiece	Backward, Quadruple Nosepiece					
Objective	45mm DIN Achromatic 4x, 10x, 40x(S), 100x(O,S)					
Working Stage	Double Layer Mechanical Stage, Size 125*125mm, Moving Range X-Y 50*40mm					
Condenser	Abbe N.A.1.25, With Dia.2-Dia.30mm Iris Diaphragm,					
Focusing	Low Position Designed, Coaxial Coarse & Fine Focusing, Coarse Focusing Range 25mm, Fine Focusing Scale 0.002mm, With Tension Adjustment, With Upper Safety Stop					
Light Source	LED Lamp					
G.W.	10KG					
Package	2 Sets/Carton					

# A11.1513

## Toy Biological Microscope Gift Set

**OPTO-EDU**



A11.1513 Toy Microscope Gift Set	
Head	Monocular, Inclination Adjustable
Magnification	100x,400x,900x
Eyepiece	10x
Objective	10x,40x,90x
Nosepiece	Triple
Working Stage	Clip Stage 65x72mm
Condenser	Disc Diaphragm, With 8 Holes, With Blue, Green, Red, Light Green Filters
Power	LED Light, Cordless Powered By Batteries AA x 2pcs, With Mirror
Product Size	14x9x23cm,N.W.0.6Kgs

A11.1513 Packing & Accessories	
Experimentation Appliance Kit	Plastic Suitcase Packing Box Size 35x42x12cm
	Shrimp Hatchery
	Brine Shrimp Eggs
	Specimen Slicer
	Petri Dish
	Plastic Tweezers
	Plastic Scalpel
	Plastic Spatula
	Needle
	Plastic Stirring Rod
	Graduated Cylinder
	Eosin
	Gum Media (bottle)
	Sea Salt
	Prepared Slides*5
	Blank Slides*7
	Slide Covers*7
	Statistical Slide Covers*7
	Slide Labels*7
	Collecting Vials*2
Spare LED Bulb	



Beginner compound microscope provides high magnification for educational applications  
 Monocular viewing head with led and mirror illumination and built-in color filter wheel  
 Forward-facing rotating turret provides 100X, 400X, 900X magnifications  
 Coarse focus has a rack-and-pinion focus mechanism on a durable and stain-resistant white metals frame  
 Comes with full set accessory kits and hard-sided plastic abs case



# A11.1509

## Digital Student Biological Microscope Gift Set

**OPTO-EDU**



Full Metal Body + Glass Optical Lens Biological Microscope  
 Total Magnification 1280x, Eyepiece WF10x,16x, Barlow Lens 2x, Objective 4x,10x,40x  
 Clip Stage 90x90mm, Vernier Scale Moving Ruler Optional  
 Up & Bottom LED Light Source Both Brightness Adjustable  
 Full Set Experiment Material Accessory Set Packed In Plastic Suitcase

### A11.1509 Digital Student Biological Microscope Gift Set

Cata. No.	A11.1509-M	A11.1509
Magnification	40x-640x	40x-1280x
Head	Monocular Head, 45° Inclined, 360° Rotatable	
Eyepiece	WF10x,16x	WF10x,16x, Barlow Lens 2x
Nosepiece	Outward Triple Nosepiece	
Objectives	185 Achromatic 4x,10x,40x(S)	
Focusing	Coarse Focusing Knob, Focusing Range: 20mm	
Stage	90*90mm, Clip Stage	
Condenser	Single Lens Condenser, 6 Holes Disc Diaphragm, With Built-in 5 Filters	
Light Source	Up & Bottom LED Light, Both Brightness Adjustable	
Power	Cordless Batteries (3xAAA Batteries NOT Included), Adapter Included (110V/220V Optional)	
Package	Foam + Carton	Plastic Suitcase + Carton
Accessory Kit	--	Plastic Microtom 1 pc
		Hatching Box 1 pc
		Staw Tube 1 pc
		Tweezer 1pc
		Sea Salt 1 Bottle
		Yeast 1 Bottle
		Worm Eggs 1 Bottle
		Glue 1 Bottle
Digital Eyepiece Camera	--	Blank Slides 5 pcs, Prepared Slides 5 pcs, In 1 Box 100K USB2.0

# A11.1510

## Digital Student Biological Microscope Gift Set

**OPTO-EDU**



Full Metal Body + Glass Optical Lens Biological Microscope  
 Total Magnification 1280x, Eyepiece WF10x,16x, Barlow Lens 2x, Objective 4x,10x,40x  
 Clip Stage 90x90mm, Vernial Scale Moving Ruler Optional  
 Up & Bottom LED Light Source Both Brightness Adjustable  
 Full Set Experiment Material Accessory Set Packed In Plastic Suitcase

### A11.1510 Digital Student Biological Microscope Gift Set

Cata. No.	A11.1510-M	A11.1510
Magnification	40x-640x	40x-1280x
Head	Monocular Head, 45° Inclined, 360° Rotatable	
Eyepiece	WF10x,16x	WF10x,16x, Barlow Lens 2x
Nosepiece	Outward Triple Nosepiece	
Objectives	185 Achromatic 4x,10x,40x(S)	
Focusing	Coarse Focusing Knob, Focusing Range: 20mm	
Stage	90*90mm, Clip Stage	
Condenser	Single Lens Condenser, 6 Holes Disc Diaphragm, With Built-in 5 Filters	
Light Source	Up LED Light Pen, Bottom LED Light Brightness Adjustable	
Power	Cordless Batteries (3xAAA Batteries NOT Included), Adapter Included (110V/220V Optional)	
Package	Foam + Carton	Plastic Suitcase + Carton
Accessory Kit	--	Plastic Microtom 1 pc
		Hatching Box 1 pc
		Staw Tube 1 pc
		Tweezer 1pc
		Sea Salt 1 Bottle
		Yeast 1 Bottle
		Worm Eggs 1 Bottle
		Glue 1 Bottle
Digital Eyepiece Camera	--	Blank Slides 5 pcs, Prepared Slides 5 pcs, In 1 Box 100K USB2.0



# A11.1511

## Digital Student Biological Microscope Gift Set

**OPTO-EDU**



Full Metal Body + Glass Optical Lens Biological Microscope  
 Total Magnification 1280x, Eyepiece WF10x,16x, Barlow Lens 2x, Objective 4x,10x,40x  
 Clip Stage 90x90mm, Vernial Scale Moving Ruler Optional  
 Up & Bottom LED Light Source Both Brightness Adjustable  
 Full Set Experiment Material Accessory Set Packed In Plastic Suitcase

### A11.1511 Digital Student Biological Microscope Gift Set

Cata. No.	A11.1511-M	A11.1511
Magnification	40x-640x	40x-1280x
Head	Monocular Head, 45° Inclined, 360° Rotatable	
Eyepiece	WF10x,16x	WF10x,16x, Barlow Lens 2x
Nosepiece	Outward Triple Nosepiece	
Objectives	185 Achromatic 4x,10x,40x(S)	
Focusing	Coarse Focusing Knob, Focusing Range: 20mm	
Stage	90*90mm, Clip Stage	
Condenser	Single Lens Condenser, 6 Holes Disc Diaphragm, With Built-in 5 Filters	
Light Source	Up Light Pen, Bottom LED Light Brightness Adjustable	
Power	Cordless Batteries (3xAAA Batteries NOT Included), Adapter Included (110V/220V Optional)	
Package	Foam + Carton	Plastic Suitcase + Carton
Accessory Kit	--	Plastic Microtom 1 pc
		Hatching Box 1 pc
		Staw Tube 1 pc
		Tweezer 1pc
		Sea Salt 1 Bottle
		Yeast 1 Bottle
		Worm Eggs 1 Bottle
		Glue 1 Bottle
Digital Eyepiece Camera	--	Blank Slides 5 pcs, Prepared Slides 5 pcs, In 1 Box 100K USB2.0

# A11.1512

## Digital Student Biological Microscope Gift Set

**OPTO-EDU**



Full Metal Body + Glass Optical Lens Biological Microscope  
 Total Magnification 1280x, Eyepiece WF10x,16x, Barlow Lens 2x, Objective 4x,10x,40x  
 Clip Stage 90x90mm, Vernial Scale Moving Ruler Optional  
 Up & Bottom LED Light Source Both Brightness Adjustable  
 Full Set Experiment Material Accessory Set Packed In Plastic Suitcase

### A11.1512, A11.1545 Digital Student Biological Microscope Gift Set

Cata. No.	A11.1512-M	A11.1512	A11.1512-100K	A11.1512-300K	<a href="#">A11.1545</a>	<a href="#">A11.1545-E</a>
Magnification	40x-640x	40x-1280x	40x-1280x	40x-1280x	40x-640x	40x-640x
Head	Monocular Head, 45° Inclined, 360° Rotatable					
Eyepiece	WF10x,16x	WF10x,16x, Barlow Lens 2x			WF10x,16x	WF10x,16x
Nosepiece	Outward Triple Nosepiece					
Objectives	185 Achromatic 4x,10x,40x(S)					
Focusing	Coarse Focusing Knob, Focusing Range: 20mm					
Stage	90*90mm, Clip Stage				90*90mm, Vernial Scale Stage, Moving Range 30x60mm	
Condenser	Single Lens Condenser, 6 Holes Disc Diaphragm, With Built-in 5 Filters					
Light Source	Up & Bottom LED Light, Both Brightness Adjustable					
Power	Cordless Batteries (3xAAA Batteries NOT Included), Adapter Included (110V/220V Optional)					
Package	Foam + Carton	Plastic Suitcase + Carton				
Accessory Kit	--	Plastic Microtom 1 pc				
		Hatching Box 1 pc				
		Staw Tube 1 pc				
		Tweezer 1pc				
		Sea Salt 1 Bottle				
		Yeast 1 Bottle				
		Worm Eggs 1 Bottle				
		Glue 1 Bottle				
		Blank Slides 5 pcs, Prepared Slides 5 pcs, In 1 Box				
Digital Eyepiece Camera	--	--	100K USB2.0	300K USB2.0	--	300K USB2.0
<a href="#">Upgrade To A33.1501 3.5" LCD Digital Biological Microscope</a>						



# A11.1526

## Student Biological & Stereo Microscope

OPTO-EDU



Compact Biological + Stereo All-in-One Design  
20x~100x Zoom Magnification  
Round Stage Dia.82mm With Clips And Disc Diaphragm  
Upper + Bottom LED Light Brightness Adjustable  
Cordless Powered By 3xAAA Batteries

### A11.1526 Student Biological & Stereo Microscope

Magnification	20x~100x
Head	Monocular, Inclined 45°, Rotatable 360°
Eyepiece	WF10x/18mm
Objective	Zoom 2x~10x Lens
Working Stage	Round Stage Dia.82mm, With Clips
Condenser	Disc Diaphragm
Focusing	Coarse Focusing Knob, Focusing Range 25mm
Light Source	Upper 10 LEDs Ring Light, Bottom LED Light Brightness Adjustable
Power	Cordless, Powered By 3xAAA Batteries (NOT Included For Air Shipment)



Round Clip Stage Dia.82mm With Iris Diaphragm



Zoom 2-10x Objective, Upper 10 LEDs Light

# A11.1529

## Student Biological Microscope, Cordless Dual Light, Plastic Body

**OPTO-EDU**



40x~400x Magnification  
Dual Up & Bottom LED Light Source  
Cordless Powered by AA 1.5V Battery 3 pcs  
Plain Stage 90x90mm With Clip & Disc Diaphragm  
Compact All in One Design for Easy Moving

### A11.1529 Student Biological Microscope, Dual Light, Plastic Body

Head	Monocular, 45° Inclined , 360° Rotatable
Eyepiece	WF10x/16mm
Objective	Achromatic 4x,10x, 40x(S)
Nosepiece	Outward Triple
Focusing	Coarse Focusing Knob, Focusing Range 18mm
Working Stage	Plain Stage With Clips, Size 90x90mm
Condenser	Single Lens Condenser, 6 Holes Disc Diaphragm
Illumination	Up & Bottom LED Light, Both Brightness Adjustable
Power	Powered By Outlet AC/DC Adapter (110V/220V), Or By 3xAA Batteries (Not Included) For Cordless Usage Power Switch With 4 Levels: Off, Up LED, Bottom LED, Up & Bottom LED





# A11.1505

## Student Biological Microscope, Round Stage

**OPTO-EDU**



**Round Working Stage Dia.120mm**



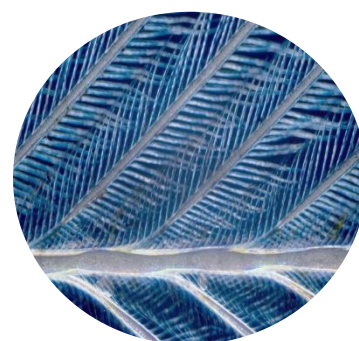
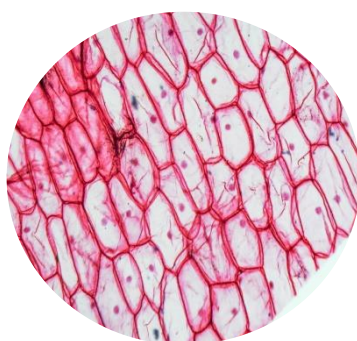
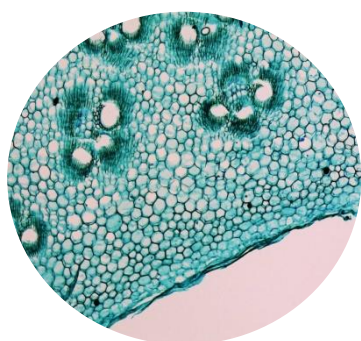
Straight Monocular Head Inclination Adjustable  
Total Magnification 25x~675x, Eyepiece H5x,10x,15x, Objective 5x,10x,45x  
Separate Coarse & Fine Focusing Knob, Focus Range 27mm  
Round Stage Dia.120mm With Single Lens Condenser  
Plan-Concave Mirror Dia. 50mm

### A11.1505 Biological Microscope

Total Magnification	25x - 675x
Head	Monocular Vertical Head Tube
Eyepiece	5x, 10x, 15x
Objectives	5x, 10x, 45x
Illuminator	Concave-Plano Mirror Dia. 50mm
Focusing	Coarse Adjustment Range: 27mm, Fine Adjustment Range : 1.4~1.8mm
Stage	Round Working Stage Dia. 120mm

### A11.1505 Biological Microscope Optional Accessories

Illuminator	Electrical Illuminator (110V/220V 20W)
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# A11.1508

## Student Biological Microscope, Vertical Monocular Head

**OPTO-EDU**



Monocular Vertical Head, Whole Body Inclination Adjustable  
 Total Magnification 40x~1600x Available  
 Coarse & Fine Focusing Knob, Focusing Range 50mm  
 Single Layer Stage With Vernial Scale Attached  
 Plan-Concave Mirror Dia. 40mm

### A11.1508 Student Biological Microscope

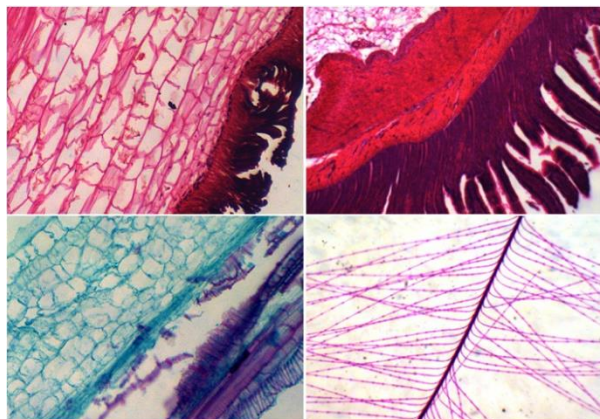
		1	2	3	4	5	6
Head	Mono Vertical Tube	•	•	•	•	•	•
Eyepiece	5x	-	-	•	•	•	•
	10x	•	•	•	•	•	•
	12.5x	•	-	-	•	-	-
	15x	-	-	-	-	•	-
	16x	-	•	-	-	-	•
Objective	4x	•	•	-	-	-	-
	10x	•	•	•	•	•	•
	40x	•	•	•	•	•	•
	100x	-	-	•	•	•	•
Nosepiece	Triple Revolving Nosepiece	•	•	•	•	•	•
Stage	Stage with Specimen Clips, Size 110x120mm	•	•	-	-	-	-
	Stage with Specimen Clips, Size 120x120mm	-	-	•	•	•	•
	Mechanical Slide Holder Vernial Scale	-	-	•	•	•	•
Condenser	5 Holes Disc Diaphragm	•	•	-	-	-	-
	N.A.=1.25 with Iris Diaphragm & Filter	-	-	•	•	•	•
Focusing	Separate Coarse and Fine Focusing Knobs	•	•	•	•	•	•
	Coarse Focusing Range 50mm, Fine Focusing Range 1.8mm-2.2mm	•	•	•	•	•	•
Light Source	Concave-Plan Mirror, Dia 50mm	•	•	•	•	•	•
Optional Accessories							
Light Source	Attachable Electrical Illuminator (110V/220V 20W)	A56.1501					
	LED 0.75W, Brightness Adjustable, Recharge Battery 3.7V, 400mAh, Power By DC3.5 Charger	A56.5110					
	LED 0.75W, Brightness Adjustable, 400mAh, Power By DC3.5 Charger	A56.5110-N					



# A11.1518

## Student Biological Microscope

**OPTO-EDU**



The Cheapest Binocular Head Student Microscope  
 Total Magnification 40x~400x,  
 WF10x Eyepiece, Achromatic 4x,10x,40x Objectives  
 LED Light Source Brightness Adjustable  
 3xAA Batteries And DC In Power Supply Optional



Student Biological Microscope		A11.1518-M	A11.1518-B
Magnification	40x~400x		
Head	Monocular, 45° Inclined, 360° Rotatable	o	
	Binocular, 45°Inclined, 360° Rotatable		o
Eyepiece	WF10x/16mm		
Objectives	Achromatic 4x,10x, 40x(Spring)		
Nosepiece	Backward Tripe Nosepiece		
Working Stage	Plain Stage with Clips, Size: 90x90mm		
Focusing	Coarse Focusing Knob, Focusing Range 15mm		
Condenser	Abbe Condenser N.A. 0.65, With 6 Holes Disc Diaphragm		
Illumination	Bottom LED Light, Brightness Adjustable		
Power	Powered By Outlet AC/DC Adapter (110V/220V), Or By 3 pcs AA Batteries (Not Included) For Cordless Usage		

# A11.1521

## Student Biological Microscope

**OPTO-EDU**



Monocular, Binocular, Trinocular Head Optional  
 Total Magnification 40x-1000x Achromatic Optical System  
 Double Layer Mechanical Stage 115x125mm With Abbe N.A.1.25 Condenser  
 Coaxial Coarse & Fine Focusing Knob  
 Halogen 6V20W or LED Light Source Brightness Adjustable

## 02 NOSEPIECE

Outward quadruple nosepiece, ball bearing inner locating, equipped with achromatic 4x, 10x, 40x(s), 100x(s, oil).



A11.1521 Biological Microscope		-M	-B	-T
Head	Monocular Head, 45° Inclined, 360° Rotatable	o		
	Binocular Head, 30° Inclined, 360° Rotatable		o	
	Trinocular Head, 30° Inclined, 360° Rotatable			o
Eyepiece	WF10x			
Nosepiece	Quadruple Nosepiece, Ball Bearing Inner Locating			
Objective	Achromatic 4x,10x,40x(s), 100x(s, oil)			
Working Stage	Double Layer Mechanical Stage 115*125mm			
Focusing	Coaxial Coarse & Fine Focus Knob, Coarse Focusing Range 20mm			
Condenser	Abbe Condenser N.A.1.25, With Iris Diaphragm Filter			
Light Source	Halogen Lamp or LED Optional, Brightness Adjustable			
A11.1521 Biological Microscope Optional Accessories				
Eyepiece	WF16x			A51.1503-16



# A11.1521-M1

## Student Biological Microscope, Monocular, Plastic Body

**OPTO-EDU**



Monocular Head 45° Inclined 360° Rotatable  
Total Magnification 40x-400x Achromatic Optical System  
Plain Working Stage 115x125mm With Disc Diaphragm  
Coaxial Coarse & Fine Focusing Knob  
LED Light Source Brightness Adjustable

## 02 NOSEPIECE

Outward triple nosepiece, ball bearing inner locating, equipped with achromatic 4x, 10x, 40x.



## 03 WORKING STAGE

Metal plain stage 120x120mm with clips.

### A11.1521-M1 Biological Microscope

Head	Monocular Head, 45° Inclined, 360° Rotatable
Eyepiece	WF10x/16mm
Nosepiece	Triple Nosepiece, Outward, Ball Bearing Inner Locating
Objective	Achromatic 4x, 10x, 40x(s)
Working Stage	Metal Plain Stage, With Clips, 120x120mm
Focusing	Coaxial Coarse & Fine Focus Knob, Coarse Focusing Range 33mm
Condenser	Condenser N.A.0.65, Disc Diaphragm
Light Source	LED

### A11.1521-M1 Biological Microscope Optional Accessories

Eyepiece	WF16x	A51.1503-16
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# A11.1531

## Student Biological Microscope

**OPTO-EDU**



A11.1531-M

A11.1531-V

A11.1531-T

A11.1531-B

Monocular, V Teaching, Binocular, Trinocular Head Available  
 Optional WF16x, WF20x Eyepiece Enable Utmost 2000X Optical Magnification.  
 Abbe Condenser N.A. 1.25 With Iris Diaphragm And Filter Holder  
 Quaduple Nosepiece With Achromatic Objectives 4x,10x,40x,100x  
 3W LED Brightness Adjustable

### A11.1531 Student Biological Microscope

Model	A11.1531-V	A11.1531-M	A11.1531-B	A11.1531-T
Optical System	Finity Optical System			
Head	Teaching Head	Monocular Head	Binocular Head	Trinocular Head
	Inclined at 30°, 360°Rotatable, Interpupillary Distance 54~75 mm, Diopter Adjustable ± 5 On Left Tube			
Eyepiece	Wide Field Eyepiece WF10X/18mm			
Objective	Achromatic Objectives 4X 10X 40Xs 100Xs(oil)			
Nosepiece	Quaduple Nosepiece			
Condenser	Abbe Condenser N.A. 1.25 With Iris Diaphragm And Filter Holder			
Focusing System	Coaxial Coarse and Fine Adjustments, Fine Division 0.002mm, Coarse Stroke 36mm Supplied With An Adjustable Rack Stop To Prevent Damage To Sample And Objectives, The Coarse Adjustment Are Equipped With Friction Control			
Stage	Double Layer Mechanical Stage 110X125mm, Moving Range 30X75mm			
Illumination	3W LED Brightness Adjustment			
	Optional: Power By Battery			
	Optional: Power By Rechargeable Battery With External 100-240V Mains Adapter			
Adapter	Eyepiece Tube Adapter	N/A	N/A	Eyepiece Tube Adapter

### A11.1531 Biological Microscope Optional Accessories

Eyepiece	Wide Field Eyepiece WF16X/13mm	A51.1503-16
	Wide Field Eyepiece WF20X/11mm	A51.1503-20
Objective	Plan Achromatic CF Objectives 4X 10X 40Xs 100Xs (oil)	A52.1510
CCD Adapter	1.0X	A55.1530-10
	0.5X	A55.1530-05



# A11.1551

## Student Biological Microscope

**OPTO-EDU**



**A11.1551-M**



**A11.1551-T**



**A11.1551-B**

Monocular, Binocular, Trinocular And Teaching Head Available For Choose.  
 Quadruple Nosepiece With Precise Click Stop.  
 Intergrated Double Layer Mechanical Stage, Size 142x132mm, Moving Range 75x50mm.  
 Abbe Condenser N.A.1.25, High Brightness 3W LED, Brightness Adjustable  
 Finity Optical System, Achromatic

### A11.1551 Biological Microscope

Model	A11.1551-M	A11.1551-B	A11.1551-T
Optical System	Finity Optical System, Achromatic		
Head	Monocular Viewing Head	Seidentopf Binocular Head	Seidentopf Trinocular Head
	Inclined at 30°, 360° Rotatable	Inclined at 30°, 360° Rotatable	Inclined at 30°, 360° Rotatable
Eyepiece	Wide Field Eyepiece WF10X/18mm		
Objective	Achromatic Objectives 4X 10X 40Xs 100Xs(oil)		
Nosepiece	Quadruple Nosepiece		
Condenser	Abbe Condenser N.A. 1.25 With Diaphragm, Filter		
Focusing	Coaxial Coarse and Fine Adjustment, Fine Division 0.002mm, Coarse Stroke 36mm With Tension Adjustment		
Stage	Double Layer Mechanical Stage 142X132mm, Moving Range 75X50mm		
Illumination	6V/20W Halogm Lamp, Brightness Adjustable		
Adapter	N/A	N/A	Eyepiece Tube Adapter

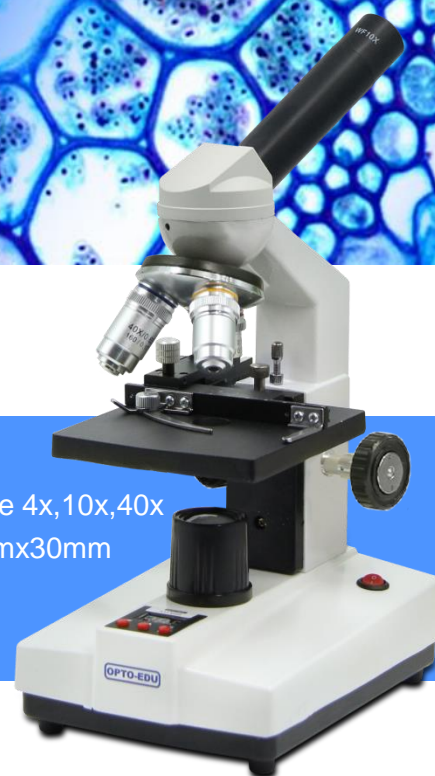
### A11.1551 Biological Microscope Optional Accessories

Eyepiece	Wide Field Eyepiece WF16X/13mm	A51.1503
	Wide Field Eyepiece WF20X/11mm	A51.1503
Objective	Plan Achromatic CF Objectives 4X 10X 40Xs 100Xs (oil)	A52.1510
Nosepiece	Quintuple Nosepiece	A54.1502-5A
CCD Adapter	1.0x C-Mount	A55.1550-10
	0.5x C-Mount	A55.1550-05
Illumination	3W LED Brightness Adjustable, Rechargeable, Without Batteries	A56.1503

# A11.5101

## Heating Stage Biological Microscope

**OPTO-EDU**



Temperature Control & Display LED On Base  
 Total Magnification 40x-640x, Eyepiece H10x, H16x, Objective 4x, 10x, 40x  
 Heated Stage 37°C-38°C, Size 110mmx120mm, Moving 60mmx30mm  
 LED Light Source Power By DC 12V, Brightness Adjustable  
 Aluminum Case To Pack All Accesories For Easy Carring



Temperature Control And Display Screen To Ensure The Activity Of The Observed Sample And Make The Observation Result More Accurate



Aluminum Box + Strong Master Carton

A11.5101 Heating Stage Biological Microscope	
Magnification	40x-640x
Eyepiece	H10x, H16x
Head	Monocular, 45° Inclined 360° Rotatable
Nosepiece	Triple
Objective	Achromatic 4x, 10x, 40x(s)
Focusing	Coarse Focusing Distance 20mm
Stage	Heated Stage 37°C-38°C, Size 110x120mm, Moving Range 60mmx30mm
Condenser	Disc Rotating Diaphragm, Φ3.2, Φ4, Φ5, Φ8, Φ15
Light Source	LED, 12V, Brightness Adjustable
Packing	Aluminum Box + Strong Master Carton



# A11.5121 Microscope

**OPTO-EDU**

Monocular, Binocular, Trinocular Head Optional  
Total Magnification 40x-1000x Achromatic Optical System  
Double Layer Mechanical Stage 115x125mm With Abbe N.A.1.25 Condenser  
Coaxial Coarse & Fine Focusing Knob LED Light Source Brightness Adjustable  
Experiment Kit, Pack In Hand Carry Case+Carton

## Product Upgrade



**A31.5121 Digital  
Biological  
Microscope, 5.0M**



**A33.5121 9" LCD Biological + USB  
Portable Dual Lens Digital  
Microscope, 5.0M**

## Specification

### A11.5121 Biological Microscope

Head	Binocular Head, 30° Inclined, 360° Rotatable
Eyepiece	WF10x, WF16x
Nosepiece	Quadruple Nosepiece, Ball Bearing Inner Locating
Objective	Achromatic 4x, 10x, 40x(s), 100x(s, oil)
Working Stage	Double Layer Mechanical Stage 115*125mm
Focusing	Coaxial Coarse & Fine Focus Knob, Coarse Focusing Range 20mm
Condenser	Abbe Condenser N.A.1.25, With Iris Diaphragm Filter
Light Source	LED, Brightness Adjustable
Accessory	Prepared Slide 10pcs in Box, Experiment Kit
Packing	Hand Carry Box + Master Carton

# A11.0216

## Biological Microscope

OPTO-EDU



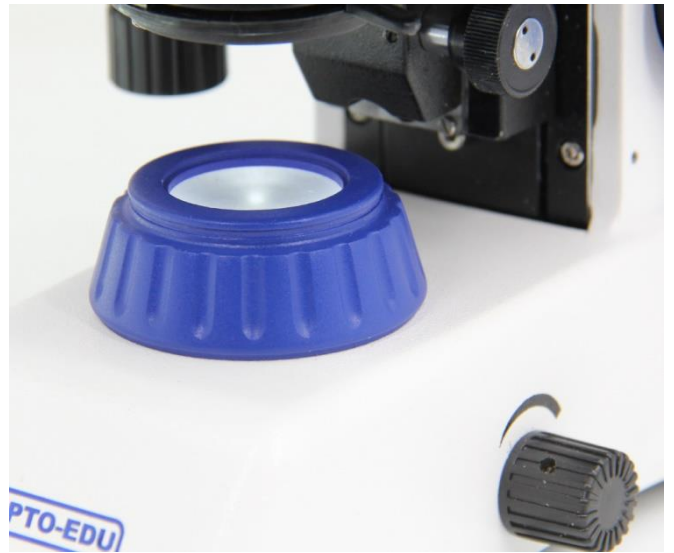
Binocular Head With Left Eyepiece Tube Diopter Adjustable  
Achromatic/Plan Objective On Quarduple With Slot For Polarzier  
Colorful Handle For Easy Carring Optional  
1W LED Light Source Brightness Adjustable  
Low Voltage Power Supply By External 5V Adapter, Or USB Power Bank



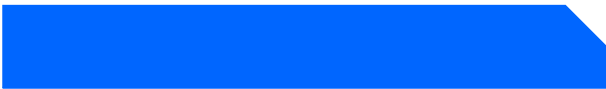




Abbe Condenser N.A.1.25, Rack & Pinion Adjustable



1W LED, Brightness Adjustable



A11.0216 Biological Microscope	
Head	Binocular Head, Inclination 30°, Rotatable 360°, Left Eyepiece Tube Diopter Adjustable
Objective (Standard)	Achromatic 4x/0.10
	Achromatic 10x/0.25
	Achromatic 40x/0.65(Spring)
	Achromatic 100x/1.25(Spring, Oil)
Objective (Optional)	Plan Achromatic 4x/0.10
	Plan Achromatic 10x/0.25
	Plan Achromatic 40x/0.65(Spring)
	Plan Achromatic 100x/1.25(Spring, Oil)
Focus System	Coaxial Coarse/Fine Focus System With Up Stop, Minimum Division Of Fine Focusing: 2µm
Nosepiece	Quadruple(Backward Ball Bearing Inner Locating)
Stage	Double Layer Mechanical (Size:125mmX115mm, Move Range: 70mmX30mm)
Abbe Condenser	N.A.1.25, Rack & Pinion Adjustable
Filter	Frosted Filter
Collector	For LED Lamp
Light Source	1W LED With Brightness Control, Optional Rechargeable Battery, External 5V Power Adapter Or USB Power Bank



# A11.0913

## Biological Microscope

**OPTO-EDU**



Newly Design Elegant Shape With High Quality Surface  
Excellent Optical System Makes Student To View Clear & Sharp Image Easily  
Double Layers Mechanical Stage 115x125mm Coaxial Course & Fine Focusing  
LED Light Source Brightness Adjustable, With Built-in Rechargeable Battery Module & LED Indicator  
Power By USB Adapter or USB Bank, Computer USB Port



Single Layer Working Stage 110x120mm With Quick Slide Clip, Double Layer Mechanical Stage 115x125mm Optional



LED Light Source Brightness Adjustable, With Built-in Rechargeable Battery Module & LED Indicator



# Product Specification

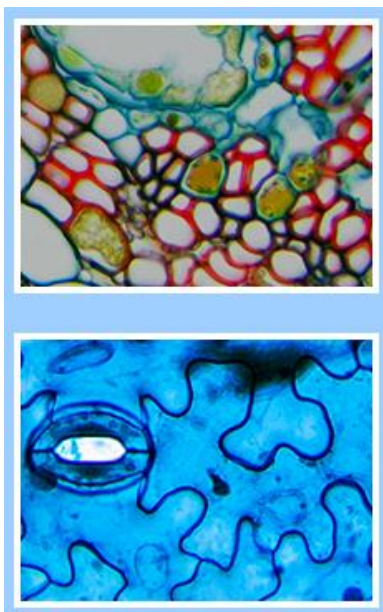


A11.0913 Student Biological Microscope		M	B	T	PB	PT
Head	Monocular Head 30° Inclined	●				
	Binocular Head 30° Inclined, 360° Rotatable, Inter-pupillary Distance 50~75mm		●		●	
	Trinocular Head 30° Inclined, 360° Rotatable, Inter-pupillary Distance 50~75mm, Light Splitting Ratio Fixed 50:50			●		●
Eyepiece	WF Plan Eyepiece 10x/18mm With Eye Guard	●	●●	●●	●●	●●
	WF Plan Eyepiece 10x/18mm With Pointer	○	○	○	○	○
	WF Plan Eyepiece 10x/18mm With Micrometer	○	○	○	○	○
Nosepiece	Reversed Quadruple Nosepiece	●	●	●	●	●
Objective	Achromatic Objectives 4x/0.10(Black)	●	●	●		
	Achromatic Objectives 10x/0.25(Black)	●	●	●		
	Achromatic Objectives 40xS/0.65(Black)	●	●	●		
	Achromatic Objectives 100xS/1.25(Oil)(Black)		●	●		
	Plan Achromatic Objectives 4x/0.10				●	●
	Plan Achromatic Objectives 10x/0.25				●	●
	Plan Achromatic Objectives 20x/0.40				○	○
	Plan Achromatic Objectives 40xS/0.65				●	●
Plan Achromatic Objectives 100xS/1.25(Oil)				●	●	
Working Stage	110x120mm Single Layer Stage, With Quick Slide Clips, N.A.0.65 Single Condenser With 5 Holes Disc Diaphragm	●				
	115x125mm Double Layers Mechanical Stage, With N.A.1.25 Abbe Condenser, With Iris Diaphragm & Filter Holder, Moving Range 22mm-71mm		●	●	●	●
Focusing	Coaxial Coarse & Fine Focus, With Coarse Adjustment Stop Screw And Tightness Adjustment, Focusing Range 13mm With Clip Stage, (7mm With Mechanical Stage), Precision 0.002mm	●	●	●	●	●
Light	0.2W LED Center Presetting, Intensity Adjustable	●	●	●	●	●
Power	External Wide Voltage AC Adapter Wide Range 100V~240V, Power By 5V1A DC Input or USB Charge, Without Battery.	●	●	●	●	●
	External Wide Voltage AC Adapter Wide Range 100V~240V, Power By 5V1A DC Input or USB Charge, With Rechargeable Battery Module	○	○	○	○	○
Adapter	C-mount 0.35x Focus Adjustable	○	○	○	○	○
	C-mount 0.5x Focus Adjustable	○	○	○	○	○
	C-mount 0.65x Focus Adjustable	○	○	○	○	○
	C-mount 1.0x Focus Adjustable	○	○	○	○	○
Other	M4 Allen Key Focus Adjustable	●	●	●	●	●
	Package by Foam And Paper Master Carton	●	●	●	●	●

# A11.1007

## Laboratory Biological Microscope XSZ107BN

OPTO-EDU



Classical 107BN Laboratory Biological Microscope  
High Quality Optical System Bring Clear & Sharp Image  
Large Size Mechanical Stage 140x140mm, Moving Range 50x75mm  
Halogen Lamp 6V20W + Plain-Concave Mirror For Using Without Power Supply  
Upgrade With Dark Field, Polarizing, Phase Contrast, Fluorescent Function





# Product Specification



## A11.1007 Biological Microscope

1	1	1	2	2	1	1	2	2
6	7	7	7	7	7	7	7	7
		T		T	W	W	W	W
					T			T

Magnification	40x~1600x	
Head	Black Monocular Teaching Head, 45° Inclined, 360° Rotatable	•
	Black Sliding Binocular Head, 45° Inclined, 360° Rotatable	•
	Black Sliding Trinocular Head, 45° Inclined, 360° Rotatable	•
	Black Seidentopf Binocular Head, 30° Inclined, 360° Rotatable	•
	Black Seidentopf Trinocular Head, 30° Inclined, 360° Rotatable	•
	White Sliding Binocular Head, 45° Inclined, 360° Rotatable	•
	White Sliding Trinocular Head, 45° Inclined, 360° Rotatable	•
	White Seidentopf Binocular Head, 30° Inclined, 360° Rotatable	•
	White Seidentopf Trinocular Head, 30° Inclined, 360° Rotatable	•
	With Eyepiece Adapter & 1.0x C-Mount	• • • • •
Eyepiece	Wide Field WF10x/18mm, WF16x/11mm	
Nosepiece	Quadruple Nosepiece	
Objective	Achromatic Objective 4x/0.1, W.D.=25mm	
	10x/0.25, W.D.=11mm	
	40x/0.6(S), W.D.=3.8mm	
	100x/1.25(S,Oil), W.D.=0.1mm	
Stage	Double Layer Mechanical Stage, 140x140mm, Mvoing Range 50x75mm	
Focusing	Low Position Coaxial Coarse & Fine Focusing. Fine Focusing Scale 0.002mm, With Tension Adjustment, With Up Limit	
Condenser	N.A.1.25 Abbe Condenser, Iris Diaphargm, With Filter Holder	
Filter	Blue, Yellow, Green	
Light Source	Built-in Illumination LED, Brightness Adjustable	
A11.1007 Biological Microscope Optional Accessories		
Video Adapter	0.45x C-Mount With Reduction Lens	A55.1002-45
Objective	Achromatic 20x/0.4, W.D.=9mm	A52.1001-20
	Achromatic 60x/085(S)	A52.1001-60
Light Source	Plan-Concave Mirror	A56.1001-1
Dark Field	Dark Field Condenser, N.A. 0.7~0.9, Dry	A5D.1006-D
	Dark Field Condenser, N.A. 1.25~1.35, Oil Immersion	A5D.1006-I
	Dark Field Objective Achromatic 100x, with Cone Diaphragm, Used With A5D.1006-I	A5D.1030-1
	Dark Field Objective Plan 100x, With Iris Diaphragm, Used With A5D.1006-I	A5D.1030-2
Polarizing	Simple Polarizing Kit	A5P.1001
Phase Contrast	Sliding Phase Contrast Set	A5C.1002-C3
	--Sliding Phase Contrast Condenser	
	--Achromatic Phase Contrast Objective 10x,40x	
	--Centering Telescope	
Fluorescent	--Green Filter	A5F.1001
	EPI-Fluorescent Kit	
	--Power Supplier 220V/110V Interchangeable, Digital Display	
	--100WHBO Ultra Hi-Voltage Spherical Mercury Lamp	
	--Barrier To Resist Ultraviolet Light	
	--Fluorescence Free Oil	
--Fluorescent Objective 10x,25x,40x,100x	A5F.1001-UV	
--Excitation Filter B/G		
	--Excitation Filter U/V	

# A11.1009

## Student Biological Microscope

**OPTO-EDU**



**A11.1009-D**



**A11.1009-E**

High Quality Compact Design Student Biological Microscope  
 WF10x/18mm Wide Field Eyepiece  
 Monocular, Binocular Head 45° Inclined, 360° Rotatable  
 Double Layer Mechanical Stage 110x120mm Moving 70x20mm  
 Coaxial Coarse & Fine Focusing Konb, Light Source Brightness Adjustable

Items	A11.1009 Student Biological Microscope	D	E
Head	Monocular Head, 45° Inclined, 360° Rotatable	●	
	Sliding Binocular Head, 45° Inclined, 360° Rotatable		●
Eyepiece	Wide Field WF10x/18mm	●	●
	WF5x	○	○
	WF16x	○	○
Nosepiece	WF10x Eyepiece With Pointer	○	○
	Triple Nosepiece	●	
Achromatic Objective	Quadruple Nosepiece		●
	4x/0.10, 10x/0.25, 40x/0.65(S)	●	
Magnification	4x/0.10, 10x/0.25, 40x/0.65(S), 100x/1.25(S,Oil)		●
	20x 60x	○	○
Stage	40x~400x	●	
	40x~1000x		●
Focusing	Double Layer Mechanical Stage, 110*120mm, Moving Range 70*20mm	●	●
Condenser	Coaxial Coarse & Fine Focusing	●	●
	Abbe Condenser N.A.1.2, With Iris Diaphragm, With Blue Filter, Rack & Pinion Up/Down Adjustment	●	●
Light Source	Incandescent Lamp Illumination 15W, Brightness Adjustable	●	
	LED Lamp Illumination 1W, Brightness Adjustable		●
Spare Parts	Mirror	○	○
	Dust Cover, Spare Bulb & Fuse	●	●

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories.



# A11.2601

## Student Biological Microscope

**OPTO-EDU**



A11.1551-M



A11.1551-T, -TP

A11.1551-B, -BP

Wide Field Eyepiece WF10x/18mm  
High Contrast Achromatic Objective 4x,10x,40x,100x  
Mechanical Stage 115x125mm Moving Range 70x35mm  
Full Metal Body High Rigid Construction  
3W LED, Cordless Rechargeable Function Optional

Eyepiece

Quadruple Nosepiece

Objective

Clamp

Abbe Condenser

LED Light Source

Stand

Seidentopf Binocular Head

Main Body

Mechanical Stage

Coaxial Coarse & Fine Focus

Stage Moving Knob

Power Switch & Light Controller



# Product Specification

Items	A11.2601 Student Biological Microscope	-M	-B	-T	-BP	-TP	Cata. No.
Head	Monocular Head Inclined 30°, Rotatable 360°	●					A53.2601-M
	Seidentopf Binocular Head Inclined 30°, Rotatable 360°, Interpupillary Distance 48-75mm		●		●		A53.2601-B
	Seidentopf Trinocular Head Inclined 30°, Rotatable 360°, Interpupillary Distance 48-75mm, Light Split Fixed P20/E80			●		●	A53.2601-T
Eyepiece	WF10x/18mm	●	●●	●●	●●	●●	A51.2602-1018
	WF16x/13mm	○	○	○	○	○	A51.2602-1613
	WF10x/18mm With Pionter	○	○	○	○	○	A51.2604-1018
	WF10x/18mm, With Micrometer X-0.1mm*180 Div / Y-Single Line	○	○	○	○	○	A51.2605-1018
	WF10x/18mm With Micrometer X-0.1mm*180 Div / Y-Single Line, Diopter Adjustable	○	○	○	○	○	A51.2605-1018D
Nosepiece	Quadruple, Backward	●	●	●	●	●	A54.2610-N03
Achromatic Objective	4x/0.1, W.D.=18.6mm	●	●	●			A52.2601-4
	10x/0.25, W.D.=6.5mm	●	●	●			A52.2601-10
	20x/0.40, W.D.=1.75mm	○	○	○			A52.2601-20
	40x/0.6(S), W.D.=0.47mm	●	●	●			A52.2601-40
	60x/0.80(S), W.D.=0.10mm	○	○	○			A52.2601-60
	100x/1.25(S,O), W.D.=0.07mm	●	●	●			A52.2601-100
Plan Objective	4x/0.1, W.D.=14.5mm				●	●	A52.2603-4
	10x/0.25, W.D.=5.65mm				●	●	A52.2603-10
	20x/0.40, W.D.=5.65mm				○	○	A52.2603-20
	40x/0.6(S), W.D.=0.85mm				●	●	A52.2603-40
	100x/1.25(S,O), W.D.=0.07mm				●	●	A52.2603-100
Stage	Double Layer Mechanical Size 125x115mm, Travel Range 35x75mm	●	●	●	●	●	A54.2601-S03
Condenser	Abbe N.A. 1.25(Iris Diaphragm)	●	●	●	●	●	A56.2614-09
Focusing	Coaxial Coarse And Fine Focusing Knobs, Travel Range: 22mm, Scale: 2μm	●	●	●	●	●	
C-mount	1.0x (Focus Adjustable)			○		○	A55.2601-B10
	0.5x (Focus Adjustable)			○		○	A55.2601-B05
Light Source	3W LED Illumination Systems	●	●	●	●	●	A56.2613-3W
	3W LED Illumination Systems (Rechargeable)	○	○	○	○	○	A56.2651-3WR
	12V 20W Halogen Lamp, Wide Voltage: 100V-240V	○	○	○	○	○	A56.2650-20W
	Plano-Concave Mirror	○	○	○	○	○	A56.2601-B
Dark Field	Dark Field Ring, For 4x~40x Objective	○	○	○	○	○	A5D.2611-B
Polarizing	Analyzer + Polarizer Set	○	○	○	○	○	A5P.2601-B
Package	Carton Size 337*242*417mm, 1 Unit/Ctn						
Weight	Gross Weight 7.0kgs, Net Weighth 5.5kgs						

Note: "●" In Table Is Standard outfits, "○" Is Optional Accessories.



# A11.6603

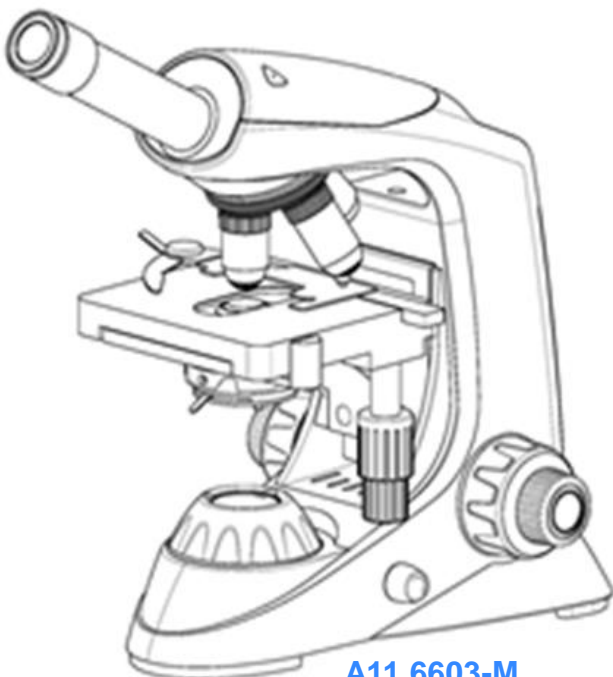
## Biological Microscope

OPTO-EDU

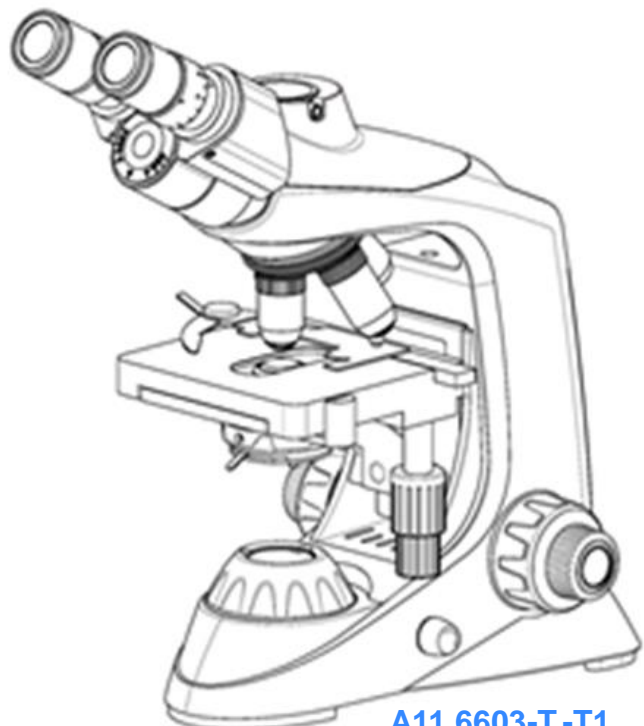


A11.6603-B, -B1

New Design in 2019 For Student & School!  
China Industrial Best Design Award-Red Star Winner Product!  
3W LED High Brightness, Support Cordless Charging Battery or Solar Power  
Excellent Optical Quality System Supply Sharp Image  
Elegant Design With Built-in Easy Handle For Easy Moving + Wire Winding Device



A11.6603-M



A11.6603-T, T1

# Product Specification

A11.6603 Biological Microscope Is Suitable For Observing All Kinds Of Biological Specimens And Can Be Used In Schools, Hospitals And Homes. It Is An Ideal Assistant For Various Learning And Experimental Research.

Items	A11.6603 Biological Microscope Specification	M	B	T	B1	T1	Cata. No.
Head	Monocular Head, Inclined 30°	●					A53.2603-M
	Seidentopf Binocular Head, Inclined 30°, Swiveling Siedentopf Head, Interpupillary Distance: 48-75mm		●		●		A53.2603-B
	Seidentopf Trinocular Head, Swiveling Siedentopf Head, Interpupillary Distance: 48-75mm, Light Split Fixed P20:E80			●		●	A53.2603-T
Eyepiece	WF10x/18mm	●●	●●	●●	●●	●●	A51.2602-1018
	WF16x/13mm	○○	○○	○○	○○	○○	A51.2602-1613
	WF10x/18mm With Pointer	○○	○○	○○	○○	○○	A51.2604-1018
	WF10x/18mm (Non-adjustable, Reticule 0.1mm)	○○	○○	○○	○○	○○	A51.2605-1018
	WF10x/18mm (Adjustable, Reticule 0.1mm)	○○	○○	○○	○○	○○	A51.2605-1018D
Nosepiece	Quadruple, Backward	●	●	●	●	●	A54.2610-N03
Achromatic Objective	4x/0.1, W.D.=18.6mm	●	●	●			A52.2601-4
	10x/0.25, W.D.=6.5mm	●	●	●			A52.2601-10
	20x/0.40, W.D.=1.75mm	○	○	○			A52.2601-20
	40x/0.6(S), W.D.=0.47mm	●	●	●			A52.2601-40
	60x/0.80(S), W.D.=0.10mm	○	○	○			A52.2601-60
	100x/1.25(S,O), W.D.=0.07mm	●	●	●			A52.2601-100
Plan Objective	4x/0.1, W.D.=14.5mm				●	●	A52.2603-4
	10x/0.25, W.D.=5.65mm				●	●	A52.2603-10
	40x/0.6(S), W.D.=0.85mm				●	●	A52.2603-40
	100x/1.25(S,O), W.D.=0.07mm				●	●	A52.2603-100
Working Stage	Mechanical Stage Size 125x115mm, Travel Range 33x71mm	●	●	●	●	●	A54.2601-S03
Condenser	Abbe Condenser N.A.1.25, Iris Diaphragm, Spiral Up/Down, With Filter Holder	●	●	●	●	●	A56.2614-09
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 25mm, Fine Focusing Scale 2µm/Division	●	●	●	●	●	
Adapter	1.0x C-Mount			○		○	A55.2601-B10
	0.5x C-Mount Focus Adjustable			○		○	A55.2601-B05
Dark Field	Dark Field Ring, For 4x~40x Objective	○	○	○	○	○	A5D.2611-B
Light Source	3W LED Illumination With Aspheric Collector, Wide Range Voltage: 100V~240V	●	●	●	●	●	A56.2612-3W
Base	External Transformer And Data Cable	●	●	●	●	●	
Package	Carton Size 435x378x265mm, 1 Unit/Ctn						
Weight	Gross Weight 6.0kgs, Net Weighth 4.4kgs						

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories.



# A12.1502

## Laboratory Biological Microscope

OPTO-EDU



Cover Can Be Removed For Easy Bulb Change

Research Level Laboratory Microscope With Infinity High Contrast Optical System  
Large View Field Eyepiece WF10x/22mm Tube Dia.30mm  
Large Size Mechanical Working Stage 216x150mm Moving 75x55mm  
Safety Rackless Round Edge Working Stage With Double Slide Holder  
3W LED Kohler Illumination With Removable Light House For Easy Maintenance



Abbe Condenser NA1.25, With Iris Diaphragm, Center Adjustable

## Product Specification



A12.1502-B



A12.1502-T



A12.1502-AB



A12.1502-AT

A12.1502 Laboratory Biological Microscope		B	T	AB	AT
Optical System	Infinity Optical System	o	o		
	Achromatic Optical System			o	o
Head	Binocular, Inclined at 30°, Interpapillary 48-75mm, 360° Rotatable	o		o	
	Trinocular, Inclined at 30°, Interpapillary 48-75mm, 360° Rotatable		o		o
Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint, Diopter Adjustment -/+5	o	o		
	WF10x/20mm, Dia.30mm, High Eyepoint, Diopter Adjustment -/+5			o	o
Nosepiece	Backward Quadruple Nosepiece	o	o	o	o
Objective	Infinite Plan High Contrast Chromatic-free 4X,10X,40X,100X	o	o		
	High Contrast Chromatic-free 4X,10X,40X,100X			o	o
Condenser	Abbe Condenser NA1.25, with Iris Diaphragm, Center Adjustable	o	o	o	o
Focusing	Coaxial Coarse and Fine Adjustment, Fine Division 0.002mm, Coarse Stroke 37.7mm/Rotation, Moving Range 24mm, With Safety Stop Screw, Tension Adjustable	o	o	o	o
Working Stage	Large Size Double Layer Mechanical Stage 216x150mm, Graphite Surface, Moving Range 75mmx55mm, Reckless Safety Round Edge	o	o		
	Large Size Double Layer Mechanical Stage 142x132mm, Graphite Surface, Moving Range 75mmx50mm			o	o
Light Source	Kohler Illumination, 3W/LED, Brightness Adjustable, With Blue Filter	o	o		
	External Illumination, 3W/LED, Brightness Adjustable, With Blue Filter			o	o
Adapter	C-Mount 1.0x		o		o

## Optional Accessories

A12.1502 Laboratory Biological Microscope Optional Accessories		
Eyepiece	WF16X/F.N.15mm	A51.1502-16
	WF20X/F.N.12mm	A51.1502-20
Nosepiece	Backward Quintuple Nosepiece	A54.1502-5
Dark Field	Dark Field Condenser, Dry, N.A.1.25	A5D.1502-D
	Dark Field Condenser, Immersion, N.A.1.25~1.36	A5D.1502-I
Polarizing	Polarizer & Analyzer	A5P.1501
Adapter	Eyepiece Tube Adapter	A55.1502-E
	C-Mount 0.5x	A55.1502-05



# A12.6603

## Biological Microscope

OPTO-EDU



Best Model Of Infinity Plan Level Microscope! China Industrial Best Design Award-Red Star Winner! Modern Design Drop Shaped Integrated Viewing Head, Eyepiece Tube Can Rotate Butterfly Freely To Fit Different Working Height  
Unique Designed Dimming Objective 4x/10x, No Need To Lower Brightness When Use Creative 100x Water Objective Instead Of 100x Oil Objective For Easy Use Without Oil  
Elegant Design With Built-in Easy Handle For Easy Moving + Wire Winding Device



100X Water Objective(Optional) Instead Of 100X Oil Objective, More Be Convenient For Using



Items	A12.6603 Biological Microscope	B	T	B 2	T2	B 3	T3	B 4	T4	Cata. No.	
Head	Seidentopf Binocular Head, Inclined 30°,Rotatable 360°, Interpupillary Distance: 48-75mm	●		●		●		●		A53.2602-B	
	Seidentopf Trinocular Head, Inclined 30°,Rotatable 360°, Interpupillary Distance: 48-75mm, Light Split Fixed P20:E80	○	●	○	●	○	●	○	●	A53.2602-T	
	Digital Head, 5.0M 1/2"CMOS USB2.0 Digital Camera Built-in, Light Split Fixed P20/E80	○	○	○	○	○	○	○	○	○	A53.2602-5.0M
	Digital Head, 5.0M 1/2"CMOS USB2.0 Digital Camera Built-in, Light Split Fixed P20/E80, With Holder For Pad	○	○	○	○	○	○	○	○	○	A53.2602-5.0MH
Eyepiece	WF10x/18mm					●	●	●	●	A51.2602-1018	
	WF10X/20mm (High Eyepoint)	●	●	●	●					A51.2602-1020	
	WF16x/13mm	○	○	○	○	○	○	○	○	A51.2602-1613	
	WF10x/18mm With Pointer	○	○	○	○	○	○	○	○	A51.2604-1018	
	WF10x/18mm With Micrometer 0.1mm*180 Div	○	○	○	○	○	○	○	○	A51.2605-1018	
	WF10x/18mm With Micrometer 0.1mm*180 Div, Diopter Adjustable	○	○	○	○	○	○	○	○	A51.2605-1018D	
Nosepiece	Quadruple, Backward	●	●	●	●	●	●	●	●	A54.2610-N03	
Infinity Eplan Objective	EPLAN 4x/0.10,W.D.=12.1mm	●	●	○	○					A52.2605-4	
	EPLAN 10x/0.25,W.D.=4.14mm	●	●	○	○					A52.2605-10	
	EPLAN 40x/0.65(S),W.D.=0.58mm	●	●	○	○					A52.2605-40	
	EPLAN 100x/1.25(S, Oil),W.D.=0.19mm	●	●	○	○					A52.2605-100	
Infinity Plan Objective	PLAN 2.5x/0.07,W.D.=8.47mm	○	○	○	○					A52.2606-2.5	
	PLAN 4x/0.10.W.D.=12.1mm	○	○	●	●					A52.2606-4	
	PLAN 10x/0.25.W.D.=4.64mm	○	○	●	●					A52.2606-10	
	PLAN 20x/0.40(S).W.D.=2.41mm	○	○	○	○					A52.2606-20	
	PLAN 40x/0.66(S).W.D.=0.65mm	○	○	●	●					A52.2606-40	
	PLAN 60x/0.80(S).W.D.=0.33mm	○	○	○	○					A52.2606-60	
	PLAN 100x/1.25(S,Oil).W.D.=0.12mm	○	○	●	●					A52.2606-100	
	PLAN 100x/1.15(S,Water).W.D.=0.19mm	○	○	○	○					A52.2606-100W	
Achromatic Objective	4x/0.1, W.D.=18.6mm					●	●	○	○	A52.2601-4	
	10x/0.25, W.D.=6.5mm					●	●	○	○	A52.2601-10	
	20x/0.40, W.D.=1.75mm					○	○	○	○	A52.2601-20	
	40x/0.6(S), W.D.=0.47mm					●	●	○	○	A52.2601-40	
	60x/0.80(S), W.D.=0.10mm					○	○	○	○	A52.2601-60	
	100x/1.25(S,O), W.D.=0.07mm					●	●	○	○	A52.2601-100	
Plan Objective	4x/0.1, W.D.=14.5mm					○	○	●	●	A52.2603-4	
	10x/0.25, W.D.=5.65mm					○	○	●	●	A52.2603-10	
	20x/0.40, W.D.=5.65mm					○	○	○	○	A52.2603-20	
	40x/0.6(S), W.D.=0.85mm					○	○	●	●	A52.2603-40	
	100x/1.25(S,O), W.D.=0.07mm					○	○	●	●	A52.2603-100	
Working Stage	Mechanical Stage Size 145×140mm, Travel Range 76×52mm, Scale 0.1mm, Double Slide Holder	●	●	●	●	●	●	●	●	A54.2601-S04	
	Rackless (Integrated) Stage, Size 140×135mm, Travel Range 75×35mm, Double Slide Holder	○	○	○	○	○	○	○	○	A54.2601-S12	
Condenser	Abbe Condenser N.A.1.25, Iris Diaphragm, Spiral Up/Down, With Filter Holder	●	●	●	●	●	●	●	●	A56.2614-09	
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 25mm, Fine Focusing Scale 2µm/Division	●	●	●	●	●	●	●	●		
Light Source	3W LED Illumination With Aspheric Collector, Wide Range Voltage: 100V~240V	●	●	●	●	●	●	●	●	A56.2612-3W	
Adapter	1.0x C-Mount Focus Adjustable		○		○		○		○	A55.2601-10	
	0.5x C-Mount Focus Adjustable		○		○		○		○	A55.2601-05	
	0.75x C-Mount Focus Adjustable		○		○		○		○	A55.2601-75	
	Digital Eyepiece Adapter, Dia.23.2mm/25mm		○		○		○		○	A55.2610	
Dark Field	Dark Field Ring, For 4x~40x Objective	○	○	○	○	○	○	○	○	A5D.2611-B	
Polarizing	Analyzer + Polarizer Set	○	○	○	○	○	○	○	○	A5P.2601-B3	
Attachment	Wire Winding Device	●	●	●	●	●	●	●	●	A50.2602	
Package	Carton Size 345×260×455mm, 1 Unit/Ctn										
Weight	Gross Weight 7.0kgs, Net Weigth 5.5kgs										
Note: "●"In Table Is Standard outfits, "○"Is Optional Accessories.											



# A12.2601

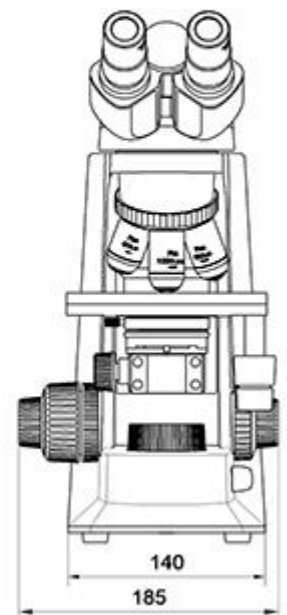
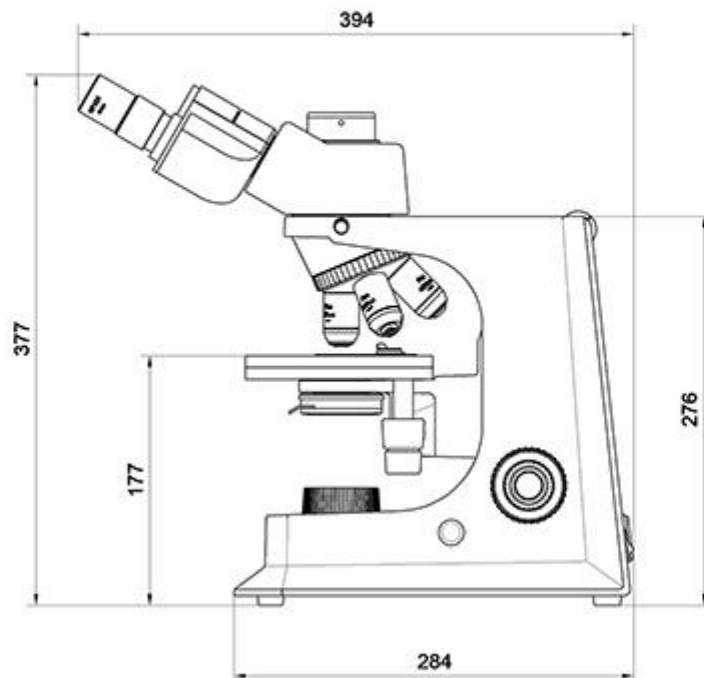
## Laboratory Biological Microscope

OPTO-EDU



Entry Level Laboratory Microscope With Full Range Upgrade Extension  
Can Use 40x LWD Infinity Plan Objective W.D.=3.0m To Avoid Contaminated By Cedar Oil  
Creative 100x Water Objective Instead Of 100x Oil Objective For Easy Use Without Oil  
High Rigidity Body Structure Design Supply High Steady & Easy Handle  
Different Color Available To Customize Your Model!

### ■ A12.2601 Biological Microscope Size(mm)







Dark Field	Dark Field Condenser, Dry, N.A.0.83-0.91, For 4x10x40x Objective	○	○	○	○	○	○	○	○	A5D.2610-S
Polarizing	Analyzer + Polarizer Set	○	○	○	○	○	○	○	○	A5P.2601-S
Phase Contrast	Infinity Plan Phase Contrast Objective 10x + Phase Contrast Slide 10x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	○	○	○	○	A5C.2601-10
	Infinity Plan Phase Contrast Objective 20x + Phase Contrast Slide 20x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	○	○	○	○	A5C.2601-20
	Infinity Plan Phase Contrast Objective 40x + Phase Contrast Slide 40x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	○	○	○	○	A5C.2601-40
	Infinity Plan Phase Contrast Objective 100x + Phase Contrast Slide 100x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	○	○	○	○	A5C.2601-100
	Turret Phase Contrast Attachment Infinity Plan Phase Contrast Objective 10x20x40x100x, Turret Phase Contrast Condenser 5-Holes, Telescope 11x, Green Filter	○	○	○	○	○	○	○	○	A5C.2603-S
Fluorescence Unit	Upgrade to A16.2601-B2/T2 Fluorescence Microscope With: B,G China Fluorescent Set 100W Mercury Lamp House 100W Mercury Power Box, Digital Disp. 6 Holes Disc Fluorescent Unit Ultraviolet Protection Barrier Centering Objective China 100W Mercury Lamp 2 pcs							○	○	A5F.2601-2
	Upgrade to A16.2601-B4/T4 Fluorescence Microscope With: B,G,U,UV China Fluorescent Set 100W Mercury Lamp House 100W Mercury Power Box, Digital Disp. 6 Holes Disc Fluorescent Unit Ultraviolet Protection Barrier Centering Objective China 100W Mercury Lamp 2 pcs							○	○	A5F.2601-4
	Upgrade to A16.2601-LB2/LT2 Fluorescence Microscope With: B,G China Fluorescent Set 6 Holes Disc Fluorescent Unit 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier							○	○	A5F.2602-2
	Upgrade to A16.2601--LB4/LT4 Fluorescence Microscope With: B,G,U,UV China Fluorescent Set 6 Holes Disc Fluorescent Unit 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier							○	○	A5F.2602-4
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	○	○	○	○	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	○	○	○	○	○	○	A55.2601-75
	C-Mount1.0x, Focus Adjustable									A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm									A55.2610
Mirror	Reflecting Mirror & Holder	○	○	○	○	○	○	○	○	A56.2601
Attachment	Wire Winding Device	○	○	○	○	○	○	○	○	A50.2602-S
Package	Carton Size 390×280×450mm, 1 Unit/Ctn									
Weight	Gross Weight: 7.5 kgs, Net Weight: 6.5 kgs									
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories										

# A12.2603

## Laboratory Biological Microscope

**OPTO-EDU**



Eyepiece Tube Dia.30mm

Best Lab Microscope With Modular Structure Design To Upgrade Easily Even After Order  
 Large Size Head With Eyepiece Tube Dia.30mm 360 Degree Rotatable.  
 Super Wide Field SWF10x/22mm Eyepiece Dia.30mm Diopter Adjustable  
 Rackless Large Mechanical Stag 182x140mm/77x52m With Double Slide Holder  
 Swing Out Condenser N.A. 0.9/0.13 + High Brightness 6V30W Halogen Koehler Illumination

Items	A12.2603 Laboratory Biological Microscope Specification	-B	-T	Cata. No.
A12.2603 Upgrade From A12.2602	--Head Upgrade To Large Size With Eyepiece Tube Dia.30mm --Eyepiece Upgrade To Dia.30mm Diopter Adjustable --Standard Objectives Upgrade To 5 pcs With 20x --Working Stage Upgrade To Large Size Rackless 182x140mm --Condenser Abbe N.A.1.25 Upgrade To Swing Out Condenser N.A.0.9/0.13 --Light Source Upgrade to 6V30W High Brightness + Blue Filter			
Head	Seidentopf Binocular Head Inclined 30°,Rotatable 360°, Interpupillary Distance 48-76mm, Eyepiece Tube Dia.30mm	●	○	A53.2623-B
	Seidentopf Trinocular Head Inclined 30°,Rotatable 360°, Interpupillary Distance 48-76mm, Light Split Switch E100:P0/E20:P80, Eyepiece Tube Dia.30mm	○	●	A53.2623-T
Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint, Diopter Adjustable	●●	●●	A51.2621-1022
Nosepiece	Quintuple	●	●	A54.2610-N01
Infinity Plan Objective	PLAN 2.5X/0.07,W.D.=8.47mm	○	○	A52.2606-2.5
	PLAN 4X/0.10,W.D.=12.10mm	●	●	A52.2606-4
	PLAN 10X/0.25,,W.D.=4.64mm	●	●	A52.2606-10
	PLAN 20X/0.40(S),W.D.=2.41mm	●	●	A52.2606-20
	PLAN 40X/0.66(S),W.D.=0.65mm	●	●	A52.2606-40
	PLAN 60X/0.80(S),W.D.=0.33mm	○	○	A52.2606-60
	PLAN 100X/1.25(S,Oil),W.D.=0.12mm	●	●	A52.2606-100
PLAN 100X/1.15(S,Water),W.D.=0.19mm	○	○	A52.2606-100W	
Working Stage	Rackless (Integrated) Mechanical Stage, Size 182x140mm, Travel Range 77x52mm, Double Slide Holder	●	●	A54.2601-S10
	Mechanical Stage Size 175 mmx145mm, Travel 76mmX52mm, Scale: 0.1mm, Double Slide Holder	○	○	A54.2601-S01



Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 22mm, Fine Focusing Div. 0.002mm	●	●	
Condenser	Swing-out Condenser, N.A.0.9/0.13, Iris Diaphragm	●	●	A56.2614-07a
Illumination	Transmit Light 6V30W Halogen Koehler Illumination, Wide Voltage 100V~240V, Field Diaphragm	●	●	A56.2613-6V30W
	Transmit Light 3W LED Koehler Illumination, Wide Voltage 100V~240V, Field Diaphragm	○	○	A56.2651-3W
Field Diaphragm	For Kohler Illumination	●	●	A56.2615-BK
Power	ECO, Auto Power Off Automatically Upon User Leaving 10 Minutes, System. Power On Automatically Upon User Approaching Detected, This Function Can Be Shut Down Manually	○	○	A56.2660
Filter	Dia.45mm, Blue	●	●	A56.2616-45B
	Dia.45mm, Green	○	○	A56.2616-45G
	Dia.45mm, Yellow	○	○	A56.2616-45A
Dark Field	Dark Field Condenser, Dry, N.A.0.83-0.91, For 4x10x40x Objective	○	○	A5D.2610-BK
	Dark Field Condenser, Immersion, N.A.1.3, For 100x Objective			A5D.2610-BKW
Polarizing	Analyzer + Polarizer Set	○	○	A5P.2601-BK
Phase Contrast	Infinity Plan Phase Contrast Objective 10x + Phase Contrast Slide 10x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2602-10
	Infinity Plan Phase Contrast Objective 20x + Phase Contrast Slide 20x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2602-20
	Infinity Plan Phase Contrast Objective 40x + Phase Contrast Slide 40x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2602-40
	Infinity Plan Phase Contrast Objective 100x + Phase Contrast Slide 100x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2602-100
	Turret Phase Contrast Attachment Infinity Plan Phase Contrast Objective 10x20x40x100x, Turret Phase Contrast Condenser 5-Holes, Telescope 11x, Green Filter	○	○	A5C.2603-BK
Fluorescence	Upgrade to A16.2604-T2 Fluorescence Microscope With A5F.2601-2: B,G China Fluorescent Set 100W Mercury Lamp House 100W Mercury Power Box, Digital Disp. 6 Holes Disc Fluorescent Unit Ultraviolet Protection Barrier Centering Objective China 100W Mercury Lamp 2 pcs		○	A5F.2601-2
	Upgrade to A16.2604-T4 Fluorescence Microscope With A5F.2601-4: B,G,U,UV China Fluorescent Set 100W Mercury Lamp House 100W Mercury Power Box, Digital Disp. 6 Holes Disc Fluorescent Unit Ultraviolet Protection Barrier Centering Objective China 100W Mercury Lamp 2 pcs		○	A5F.2601-4
	Upgrade to A16.2604-LT2 Fluorescence Microscope With A5F.2602-2: B,G China Fluorescent Set 6 Holes Disc Fluorescent Unit 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier		○	A5F.2602-2
	Upgrade to A16.2604-LT4 Fluorescence Microscope With A5F.2602-4: B,G,U,UV China Fluorescent Set 6 Holes Disc Fluorescent Unit 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier		○	A5F.2602-4
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	A55.2601-75
	C-Mount 1.0x, Focus Adjustable	○	○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm	○	○	A55.2610
Package	Carton Size 520x475x285mm, 1 Unit/Ctn			
Weight	Gross Weight: 12 kgs, Net Weight: 10 kgs			
Note: "●" In Table Is Standard outfits, "○" Is Optional Accessories				

# A12.0204

## Laboratory Biological Microscope

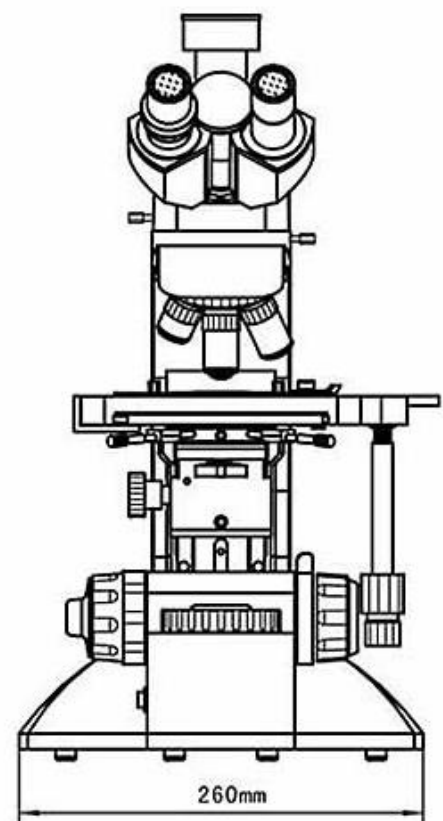
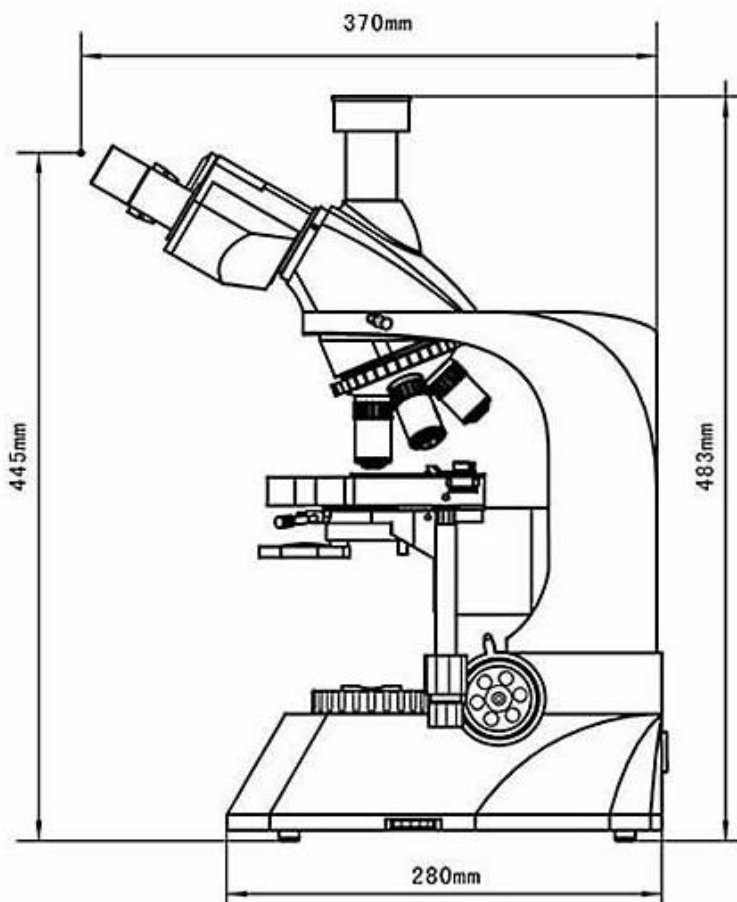
OPTO-EDU



Infinity Plan Achromatic 4x10x 40x100x



Infinity Optical System, With Infinity Plan Achromatic Objectives  
Large Size Double Layer Mechanical Stage 210\*140mm/75\*50mm  
Quadruple & Quintuple Ball Bearing Nosepiece Available  
Kohler Illumination 6V30W Halogen Lamp, Brightness Adjustable  
Full Range Optional Function: Dark Field, Polarizing, Phase Contrast





# Product Specification

A12.0204 Laboratory Biological Microscope		A	B
Optical System	Infinity Optical System	●	●
Eyepieces Tube	Trinocular, Inclination 30°, Rotatable 360°, Interpapillary 53~75mm, Left Side Eyepiece Tube Diopter Adjustable $\pm 5^\circ$ , Switch E100:P0/E0:P100	●	●
Eyepiece	WF10x/22mm	●●	●●
Infinity Plan Achromatic Objective:	PL4x/0.10, W.D.21mm	●	●
	PL10x/0.25, W.D. 5.0mm	●	●
	PL20x/0.40, W.D.8.8mm	○	●
	PL40x/0.65, W.D. 0.66mm (S)	●	●
	PL100x/1.25, W.D.0.36mm (S,O)	●	●
Nosepiece	Quadruple (Backward ball bearing inner locating)	●	○
	Quintuple (Backward ball bearing inner locating)	○	●
Working Stage	Double Layer Mechanical Stage 210*140mm, Moving Range 75*50mm	●	●
Focusing	Coaxial Coarse & Fine Focus Knob, With Tension Adjustable And Limit Stopper, Minimum Division 0.002mm	●	●
Condenser	Abbe Condenser N.A.1.25, Rack & Pinion Height Adjustable	●	●
Light Source	Kohler Illumination, 6V30W Halogen Lamp, Brightness Adjustable, Light Collector With Iris Diaphragm	●	●

A12.0204 Laboratory Biological Microscope Optional Accessories		
Eyepiece	Recital Eyepiece, WF10x/22mm, Micrometer Div 0.1mm	A51.0205-G10B
Objective:	Infinity Plan Achromatic PL20x/0.40, W.D.8.8mm	A52.0206-20
	Infinity Plan Achromatic PL60x/0.85, W.D.0.25mm	A52.0206-60
Filter	Green Filter	A56.0209-02
	Yellow Filter	A56.0209-03
Phase Contrast	Centering Telescope	A5C.0212-2
	Infinity Plan Phase Contrast Objective 10x/0.25 PHP	A5C.0234-P10
	Infinity Plan Phase Contrast Objective 20x/0.40 PHP, Spring	A5C.0234-P20
	Infinity Plan Phase Contrast Objective 40x/0.65 PHP, Spring	A5C.0234-P40
	Infinity Plan Phase Contrast Objective 100x/1.25 PHP, Spring, Oil	A5C.0234-P100
	<b>Small Turret</b> Phase Contrast Condenser	A5C.0210-1
	<b>BigTurret</b> Phase Contrast Condenser	A5C.0210-4
	Flashboard Phase Contrast Condenser With Slides *4	A5C.0210-2
Pullboard Phase Contrast Condenser With Sildes * 2	A5C.0210-3	
Dark Field	Dark Field Condenser, Dry	A5D.0210-D
	Dark Field Condenser, Immersion	A5D.0210-I
Polarizing	Simple Polarizing Set Polarizer, 360° Rotatable, Used On Base Light Collector Analyzer Slide, Inserted Into Hole On Nosepiece	A5P.0201-2
Adapter	0.5x C-Mount	A55.0202-4
	1.0x C-Mount	A55.0202-2
	0.5x C-Mount With Dividing 0.1mm/Div	A55.0202-3
	Digital SLR Camera Adapter for Canon EF Series	A55.0204-01

# A12.0205

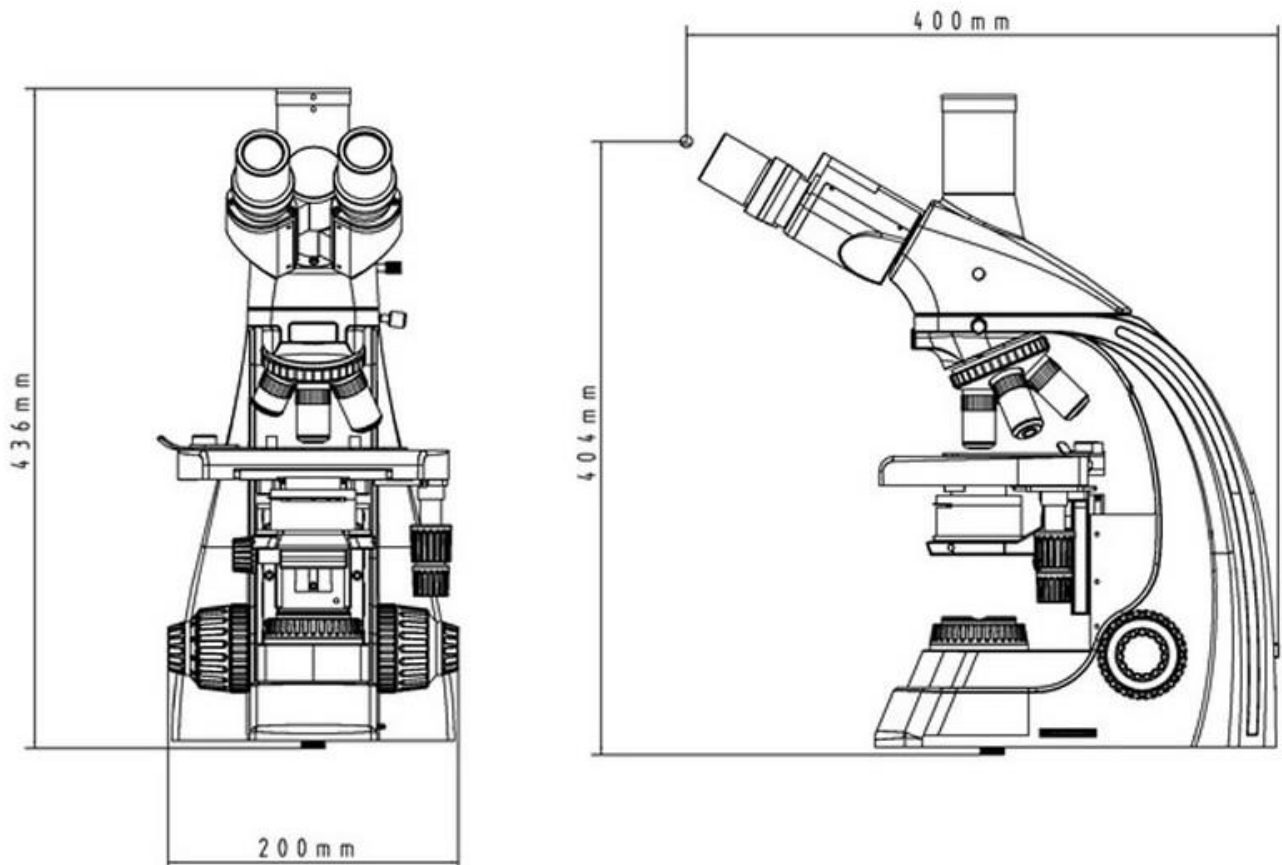
## Laboratory Biological Microscope

OPTO-EDU



360° Rotatable Head Adaptor For Easy Viewing Height Adjustable

Laboratory Research Level Biological Microscope  
Binocular & Trinocular Head Light Split Switch E100:P0/E0:P100  
Infinity Plan Achromatic Objective 4x,10x,40x, 100x  
3W LED High Brightness Light Source Brightness Adjustable  
Upgradeable To Dark Field, Polarizing, Phase Contrast Function





# Product Specification

A12.0205 Laboratory Biological Microscope		B	T
Optical System	Infinity Optical System	•	•
Head	Binocular Head, 30° Inclined, Interpupillary Distance 55~75mm, Both Eyepiece Tube Diopter Adjustable +/-5°, 360° Rotatable Head Adaptor For Easy Viewing Height Adjustable	•	
	Trinocular Head, 30° Inclined, Interpupillary Distance 55~75mm, Both Eyepiece Tube Diopter Adjustable +/-5°, Switch E100:P0/E0:P100, 100% Light Pass To Photo Tube, 360° Rotatable Head Adaptor For Easy Viewing Height Adjustable		•
Eyepiece	Wide Field Eyepiece WF10x/22mm	•	•
Nosepiece	Backward Quadruple Nosepiece, Ball Bearing Inner Locating	•	•
Objective	Infinity Plan Achromatic Objective:	•	•
	PL4x/0.10, W.D.21mm	•	•
	PL10x/0.25, W.D. 5.0mm	•	•
	PL40x/0.65, W.D. 0.66mm, Spring	•	•
	PL100x/1.25, W.D.0.36mm, Spring, Oil	•	•
Working Stage	Rackless Double Layer Mechanical Stage 180*150mm, Moving Range 75*50mm	•	•
Focusing	Coaxial Coarse & Fine Focus Knob, With Tension Adjustable And Limit Stopper, Minimum Division 0.002mm	•	•
Condenser	Abbe Condenser N.A.1.25, Rack & Pinion Height Adjustable	•	•
Light Source	High Light 3W LED, Brightness Adjustable	•	•
Optional Accessories		Cata. No.	
Eyepiece	Recital Eyepiece, WF10x/22mm, Micrometer Div 0.1mm	A51.0205-G10B	
Objective	Infinity Plan Achromatic Objective PL20x/0.40, W.D.8.8mm	A52.0206-20	
	Infinity Plan Achromatic Objective PL60x/0.85, W.D.0.25mm	A52.0206-60	
Nosepiece	Quintuple Nosepiece	A54.0203-1	
Phase Contrast	Centering Telescope	A5C.0212-2	
	Infinity Plan Phase Contrast Objective 10x/0.25 PHP	A5C.0234-P10	
	Infinity Plan Phase Contrast Objective 20x/0.40 PHP, Spring	A5C.0234-P20	
	Infinity Plan Phase Contrast Objective 40x/0.65 PHP, Spring	A5C.0234-P40	
	Infinity Plan Phase Contrast Objective 100x/1.25 PHP, Spring, Oil	A5C.0234-P100	
	Sliding Phase Contrast Condenser	A5C.0210-12	
Polarizing	Simple Polarizing Set		
	Polarizer, 360° Rotatable, Used On Base Light Collector	A5P.0201-2	
	Analyzer Slide, Inserted Into Hole On Nosepiece		
Dark Field	Dark Field Condenser, Dry	A5D.0211-D	
	Dark Field Condenser, Immersion	A5D.0211-I	
Filter	Blue Filter	A56.0209-01	
	Green Filter	A56.0209-02	
	Yellow Filter	A56.0209-03	
Adapter	CCD Adapter 0.4x	A55.0202-01	
	CCD Adapter 0.5x	A55.0202-04	
	CCD Adapter 1.0x	A55.0202-02	
	CCD Adapter 0.5x With Dividing 0.1mm/Div	A55.0202-03	
	Digital SLR Camera Adapter for Canon EF Series	A55.0204-02	

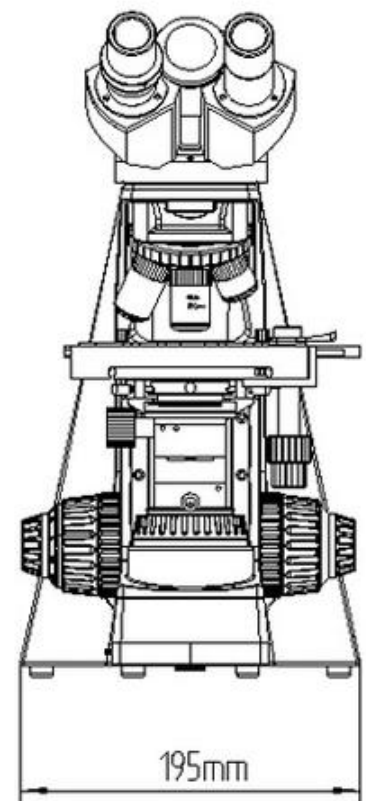
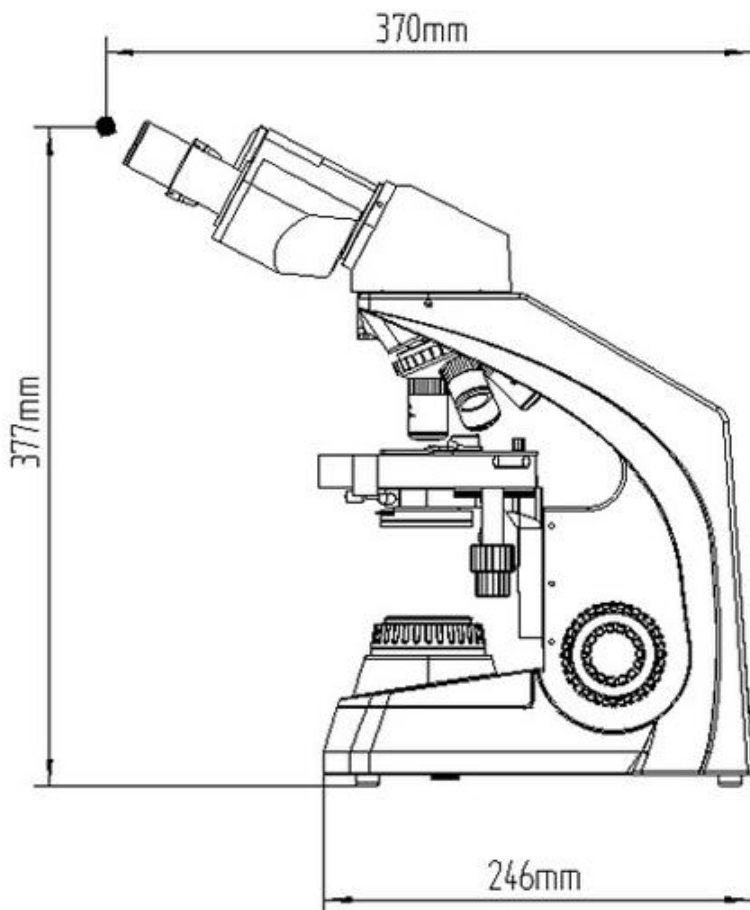
# A12.0206

## Laboratory Biological Microscope

OPTO-EDU



Binocular, Trinocular Head Available To Connect Digital Camera  
Total Magnification Upto 1500x With Optional Eyepiece WF15x  
Double Layer Mechanical Stage, Size 125x135mm, Moving Range 35x75mm  
1W LED Light Source Brightness Adjustable  
Upgradeable To Dark Field, Phase Contrast Function



## Product Specification

A12.0206 Laboratory Biological Microscope		-B	-T
Head	Binocular, 30° Inclined, Interpapillary Distance 48~75mm, Left Eyepiece Tube Diopter Adjustable +/-5°	•	
	Trinocular, 30° Inclined, Interpapillary Distance 48~75mm, Left Eyepiece Tube Diopter Adjustable +/-5°, Switch E100:P0/E0:P100, 100% Light Pass To Photo Tube		•
Eyepiece	WF10x/18mm	•	•
Nosepiece	Backward Quadruple Nosepiece, Ball Bearing Inner Locating	•	•
Achromatic Objective	4x/0.10, W.D.37.38mm	•	•
	10x/0.25, W.D. 6.61mm	•	•
	40x/0.65, W.D. 0.60mm, Spring	•	•
	100x/1.25, W.D.0.194mm, Spring, Oil	•	•
Working Stage	Double Layer Mechanical Stage, Size 125x135mm, Moving Range 75x35mm	•	•
Focusing	Coaxial Coarse & Fine Focus System, With Tensional Adjustable And Up Stop, Fine Focusing Minimum Division 2um, Moving Range 0~20mm	•	•
Light Source	1W LED light , Brightness Adjustable	•	•

## Optional Accessories

A12.0206 Laboratory Biological Microscope Optional Accessories		Cata. No.
Eyepiece	WF15x/11mm	
Nosepiece	Backward Quintuple Nosepiece, Ball Bearing Inner Locating	
Achromatic Objective	20x/0.40, W.D. 1.85mm	
	60x/0.85, W.D. 0.2mm, Spring	
Plan Achromatic Objective	4x/0.10, W.D.17.9mm	A52.0203-4
	10x/0.25, W.D. 8.8mm	A52.0203-10
	20x/0.40, W.D. 8.6mm	A52.0203-20
	40x/0.65, W.D. 0.56mm, Spring	A52.0203-40
	60x/0.85, W.D. 0.25mm, Spring	A52.0203-60
	100x/1.25, W.D.0.33mm, Spring, Oil	A52.0203-100
Working Stage	Double Layer Mechanical Stage, Size 152*132, Moving Range 75*35mm	
Dark Field Condenser	Dark Field Condenser, Dry	A5D.0211-D
	Dark Field Condenser, Immersion	A5D.0211-I
Phase Contrast Kit	Simple Phase Contrast Set: Achromatic Set 40x, Flashboard Phase Contrast Condenser, Objective 40x, Slide 40x, Centering Telescope 10x	A5C.0201-A40
	Phase Contrast Set: Achromatic Set, Big Phase Contrast Condenser, Achromatic Phase Contrast Objective 10x20x40x100x, Centering Telescope, Filter 3pcs	A5C.0202-1
	Phase Contrast Set: Plan Set, Big Phase Contrast Condenser, Plan Phase Contrast Objective 10x20x40x100x, Centering Telescope, Filter 3pcs	A5C.0202-2
Filter	Green Filter	A56.0209-02
	Yellow Filter	A56.0209-03
Adapter	0.5x C-Mount	A55.0202-4
	1.0x C-Mount	A55.0202-2
	0.5x C-Mount With Dividing 0.1mm/Div	A55.0202-3
	Adapter For CANON EF Digital SLR Camera	A55.0204-01



# A12.0806

## Heating Stage Biological Microscope

**OPTO-EDU**



Compensation Binocular & Trinocular Head 30° Inclined  
 Total Magnification 40x-640x, Eyepiece WF10x.16x, Objective 4x10x40x  
 Working Stage Temperature Control Range 20°C-50°C Accuracy ±1°C  
 Temperature Control Button & Display LED On Base  
 3W LED Light Source Brightness Adjustable

A12.0806 Heating Stage Biological Microscope Specification		PB	PT
Head	Compensation Binocular Head, 30° Inclined, Interpupillary Distance 48-75mm	●	
	Compensation Trinocular Head, 30° Inclined, Interpupillary Distance 48-75mm		●
Eyepiece	WF10X/20mm	●	●
	WF16X/15mm	●	●
195 Plan Achromatic Objective	Plan 4x	●	●
	Plan 10x	●	●
	Plan 40x (s)	●	●
	Plan 100x (S, Oil)	●	●
Nosepiece	4 Holes Revolving Nosepiece, Inward	●	●
Focusing System	Coaxial Coarse & Fine Focusing Knob, Adjustable, Coarse Focusing Range 22mm, Fine Focusing Graduation 0.002mm	●	●
Stage	Double Layer Mechanical Stage, Size: 160x142mm Moving Range: 76x52mm Can Hold 2 Slides Temperature Control Range: Room Temperature 20°C-50°C Temperature Control Accuracy: < ±1°C Heating Power: 12V Power: 36W	●	●
Condenser	Abbe Condenser N.A.=1.25, Iris Diaphragm, Center Adjustable, With Height Adjust Knob	●	●
Power	Switch Power, Wide Voltage AC90-240V	●	●
Light Source	Bottom Light, LED 3W/1A, Stepless Adjustable Light, No Screen Flashing	●	●
Dimming System	Digital Circuits, Precision Stepless Adjustable Light, No Screen Flash	●	●
Packing	Foam + Carton	●	●
Adapter	0.5x C-Mount	○	○
	0.65x C-Mount	○	○
	1x C-Mount	○	○

Note: "●" In Table Is Standard outfits, "○" Is Optional Accessories.

# A12.0921

## Biological Microscope

OPTO-EDU



Abbe Condenser With Dark Field & Phase Contrast Interface, Up/Down Adjustable

Infinity Color Corrected Optical System For Bright Field  
Simple Polarizing, Dark Field, Phase Contrast Function Optional  
Abbe Condenser N.A.1.25 Preset Center, Optional Lifting Function  
Single High Brightness 3W LED Brightness Adjustable  
Wide Range 100~240V Power Supply



Continuous Adjustable Light Intensity, Easy to

# Product Specification

A12.0921 Series Biological Student Microscope		-B	-T
Optical System	Infinity Color Corrected Optical System	●	●
Head	30° Inclined, Gemel Binocular Head, Interpupillary Distance 47~75mm	●	
	30° Inclined, Gemel Binocular Head, Interpupillary Distance 47~75mm, Light Splitting Ratio R:T= 8.2		●
Eyepiece	High Eye Point Wide Field Plan Eyepiece PL10x/20mm, Diopter Adjustable	●	●
	High Eye Point Wide Field Plan Eyepiece PL10x/18mm, Diopter Adjustable	○	○
Nosepiece	Reversed Quadruple Nosepiece	●	●
	Reversed Quintuple Nosepiece	○	○
Infinity Plan Achromatic Objective	4x/0.10, WD=11.9mm	●	●
	10x/0.25, WD=12.1mm	●	●
	40x/0.65, WD=0.36mm	●	●
	100x/1.25, WD=0.18mm	●	●
Focusing	Low Position Coaxial Focusing Mechanism, Coarse Range: 25mm, Fine Precision: 0.002mm, With Tension Adjustment And Upper Limit	●	●
Working Stage	150mmx162mm Double Layer Stage, Moving Range:76mm-50mm, Precision 0.1mm ( X-Axis Single Track Transmission)	○	○
	150mmx140mm Double Layer Stage, Moving Range:76mm-50mm, Precision 0.1mm (Triangular Guide Rail)	●	●
Illumination	N.A.1.25 Compound Eye Illumination Condenser Group (With Plug-in Phase Contrast And Dark Field Accessories' Interface), Condenser Preset Center, Optional Lifting Function, Adaptive 100V-240V Switching Power Supply, Single High Brightness 3W LED (Cold/Warm Color Optional, Cold Color Temperature 4750K-5500K, Warm Color Temperature 2850K-3250K) (Preset Center), Light Intensity Can Be Continuously Adjusted	●	●
Camera Adapter	0.35x/0.5x/0.65x/1x C-Mount Adapter, Focusing Adjustable		○

Model	Magnification	N.A. (mm)	WD (mm)	Coverslip Thickness (mm)	Immersion Liquid	Spring
PLAN Infinity Plan Achromatic Objective Series	4x	0.10	11.9	/	/	/
	10x	0.25	12.1	/	/	/
	20x	0.40	1.56	0.17	/	/
	40x	0.65	0.36	0.17	/	Yes
	60x	0.85	0.3	0.17	/	Yes
	100x	1.25	0.21	0.17	Oil	Yes
PLAN-PH2 Infinity Plan Positive Phase Contrast Objective Series	10x	0.25	12.1	/	/	/
	20x	0.40	1.56	0.17	/	/
	40x	0.65	0.36	0.17	/	Yes
	100x	1.25	0.21	0.17	Oil	Yes



A12.0921-B



A12.0921-T



# A12.0911

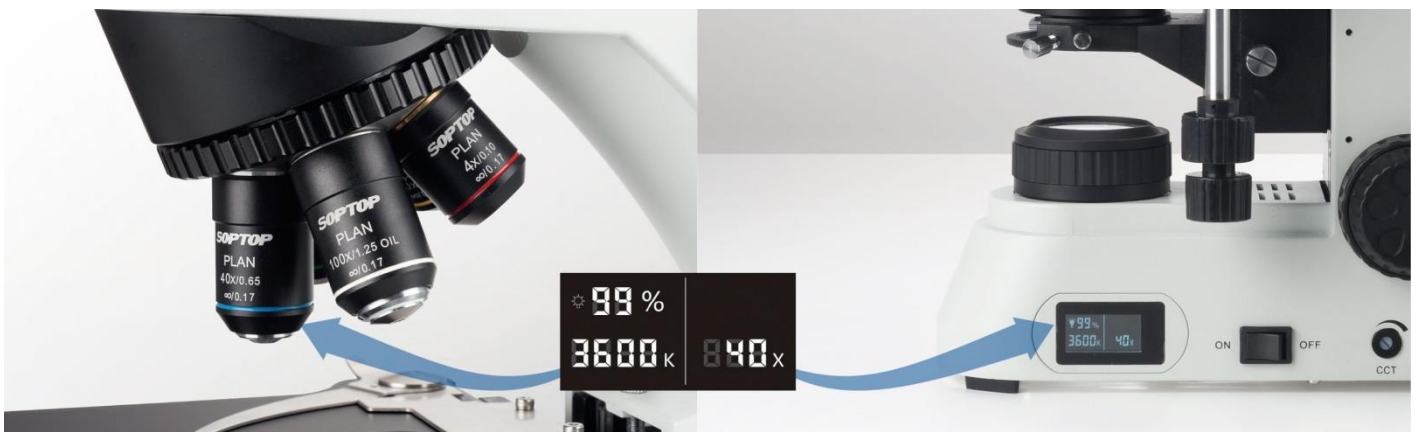
## Biological Microscope

OPTO-EDU



Rackless Working Stage

Binocular, Trinocular, Light Split 8:2, 360° Rotation, Interpapillary Distance 50-75mm  
Infinity Plan Achromatic Objective 4x.10x.20.40x.100x On 5 Holes Nosepiece  
N.A.1.25 Kohler Illumination Condenser, With Iris Diagram, Center Adjustable  
LCD Screen On Stand Showing Color Temperature & Brightness Memory Function  
Dark Field, Polarizing, Phase Contrast Fluorescent Funcion Upgradable



### Intelligent Illumination System

A12.0911 with code nosepiece is able to automatically remember the light intensity of each objective which you are used to, helps to improve the work efficiency and decrease the visual fatigue. LCD beside the frame shows color temperature and light intensity, as well as the objective magnification you are using, is helpful to make record of experiment condition.

# Product Specification

A12.0911	B	T	
Optical System	Infinity Chromatic Aberration Correction System		
Head	Binocular, 360° Rotation, Interpapillary Distance 50-75mm	Trinocular, Light Split 8:2, 360° Rotation, Interpapillary Distance 50-75mm	
Eyepiece	WF10x/20mm Wide Field Eyepiece		
Nosepiece	5 Holes Nosepiece		
Objective	Infinity Plan Achromatic 4x10x20x40x100x		
Working Stage	Rackless Double Layer Mechanical Stage 150mm×162mm		
Condenser	N.A.1.25 Kohler Illumination Condenser, With Iris Diagram, Center Adjustable		
Focusing	Low-Position Coarse And Fine Coaxial Focusing Structure, With Tension Adjustment And Upper Limit Mechanism		
Light Source	3W LED, With LCD Screen, Adjustable Color Temperature (3000K-5600K), Brightness Memory Function		
Power	Wide Range 100V -240V		
<b>A12.0911 Biological Microscope, Optional Accessories</b>			
Eyepiece	High Eye-point Wide Field Plan Eyepiece PL10X20mm, Dioptor Adjustable	A51.0904-N1020T	
	High Eye-point Wide Field Plan Eyepiece PL10X22mm, Dioptor Adjustable	A51.0904-N1022T	
Plan Achromatic Objective	2x/0.06, WD=5.03mm (Field Complement Is Needed)	A52.0906-2	
	4x/0.10, WD=11.9mm	A52.0906-4	
	10x/0.25, WD=12.1mm	A52.0906-10	
	20x/0.40, WD=1.5mm	A52.0906-20	
	40x/0.65, WD=0.36mm	A52.0906-40	
	60x/0.85, WD=0.30mm	A52.0906-60	
Phase Contrast	Plan Achromatic Objective	10x/0.25, WD=12.1mm	A5C.0937-10
		20x/0.40, WD=1.5mm	A5C.0937-20
		40x/0.65, WD=0.36mm	A5C.0937-40
		100x/1.25, WD=0.18mm	A5C.0937-100
	Phase Contrast Slide	10x, 40x	A5C.0915-P1
		20x, 100x	A5C.0915-P2
	N.A. 1.25 Koehler Illuminator DISC Phase Contrast Condenser Group, for 10x, 20x, 40x, 100x Phase Contrast Observation		A5C.0912-KP
	N.A. 1.25 Koehler Illuminator DISC Phase Contrast + Dark Field Condenser Group, For 10x, 40x, 100x Phase Contrast Observation And For 4x-40x Dark Field Observation		A5C.0912-KPD
Head	30° Inclined Gemel Binocular Viewing Head, 360° Rotatable, Interpupillary Distance Range: 50-75mm	A53.0907-B30R	
	30° Inclined Gemel Trinocular Viewing Head, Fixed Spectroscopical Ratio R:T=8:2, 360° Rotatable, Interpupillary Distance Range: 50-75mm	A53.0907-T30R	
C-Mount	0.35x Focusing C-mount	A55.0925-35	
	0.5x Focusing C-mount	A55.0925-05	
	0.65x Focusing C-mount	A55.0925-65	
	1x Focusing C-mount	A55.0925-10	
Dark Field	Dark Field Slide, For 4x-40x Objectives (Use As Bottom Light Barrier In LED Fluorescence Microscopes)	A5D.0915-K	
Polarizing	Polarizer	A5P.0915-P	
	Analyzer	A5P.0915-A	
Package	EPE And Paper Carton(Single Package:57.1*55.4*27.8CM)	A55.0915-1	
Fluorescence Module	B1 LED Fluorescence Module, Light Intensity Adjustable, Center Wavelength Of LED Is 470nm		
	G1 LED Fluorescence Module, Light Intensity Adjustable, Center Wavelength Of LED Is 560nm		
	UV2 LED Fluorescence Module, Light Intensity Adjustable, Center Wavelength Of LED Is 385nm		
	B4 LED Fluorescence Module, Light Intensity Adjustable, Center Wavelength Of LED Is 455nm		



# A12.0909

## Biological Microscope

**OPTO-EDU**



**Achromatic & Plan Objective 4x10x 40x100x**

Binocular & Trinocular Head Interpupillary Distance 50~75mm  
 Low Position Designed, Coaxial Coarse & Fine Focusing  
 Double Layer Mechanical Stage, Size 132\*140mm, Moving Range  
 50\*76mm  
 Abbe N.A.1.25, With Iris Diaphragm, Fixed But Centeradjustable Avoid  
 Missing



### A12.0909 Biological Microscope

		A	B	C	A1	B1	C1
Head	Monocular Head, 30° Inclined,	•			•		
	Binocular Head, 30° Inclined, Diopter Adjustable +/-5°, Interpapillary Distance 50~75mm		•			•	
	Trinocular Head, 30° Inclined, Diopter Adjustable +/-5°, Interpupillary Distance 50~75mm, Light Split Ratio 80:20			•			•
Objective	Achromatic 4x,10x,40x(S),100x(O,S)	•	•	•			
	Plan 4x,10x,40x(S),100x(O,S)				•	•	•
Eyepiece	WF10x/18mm						
Nosepiece	Backward, Quadruple Nosepiece						
Working Stage	Double Layer Mechanical Stage, Size 132*140mm, Moving Range 50*76mm, Precision 0.1mm						
Condenser	Abbe N.A.1.25, With Iris Diaphragm, Fixed But Center adjustable						
Focusing	Low Position Designed, Coaxial Coarse & Fine Focusing, Coarse Focusing Range 25mm, Fine Focusing Scale 0.002mm, With Tension Adjustment, With Upper Safety Stop						
Light Source	3W LED High Brightness						
Power	External Wide Voltage AC Adapter, 100V-240V_AC50/60Hz Input, DC6V 2A Output.						
	External Wide Voltage AC Adapter, 100V-240V_AC50/60Hz Input, DC7.5V 2A Output. (Optional)						
	Internal Switch 100V-240V_AC50/60Hz (Optional)						
	Internal 4 Pieces Rechargeable Batteries, External Wide Voltage Battery Charger, 100V-240V_AC50/60Hz Input, DC6V 1A Output. (Optional)						

### A12.0909 Biological Microscope Optional Accessories

Eyepiece	PL10x/18mm with Pointer, High-Eyepoint	E51.0906-1018P
	PL10x/18mm with Reticle, High Eyepoint	E51.0905-1018PR
Adapter	C-Mount 1.0x	A55.0926-10
	C-Mount 0.35x	A55.0926-35
	C-Mount 0.50x	A55.0926-50
	C-Mount 0.67x	A55.0926-67



# A12.1010

## Laboratory Microscope

OPTO-EDU



Cover Can Be Removed For Easy Bulb Change

Infinity Achromatic Objective 4x, 10x, 40x, 100x  
Abbe Condenser N.A. 1.25, Center Adjustable  
Halogen Lamp 12V20W, Brightness Adjustable  
Low Position Coaxial Coarse & Fine Focus System  
Seidentopf Binocular (Trinocular) Head, 30° Inclined, 360° Rotatable



Infinity Plan Achromatic 4x, 10x, 40x, 100x  
Safety Rackless Working Stage

# Product Specification

Items	A12.1010 Laboratory Biological Microscope	B	T
Head	Seidentopf Binocular Head, 30° Inclined, 360°Rotatable, Interpulillary Distance 48-75mm	•	
	Seidentopf Trinocular Head, 30° Inclined, 360°Rotatable, Interpulillary Distance 48-75mm		•
Eyepiece	Wide Field WF10x/20mm, Eyepiece Tube Dia.30mm, 2 pcs	•	•
Nosepiece	Backward Quadruple Nosepiece	•	•
Optical System	Infinity Optical System	•	•
Objective	Infinity Plan Achromatic 4x/0.10, 10x/0.25, 40x/0.65(S), 100x/1.25(S,Oil)	•	•
Magification	40x-1000x	•	•
Stage	Double Layer Mechanical Stage, 216x150mm, Moving range 54x78mm, Double Slide Holder, Low Position X/Y Coaxial Control Knob, With Travel Guide To Avoid Scratch	•	•
Focusing	Low Position Coaxial Coarse & Fine Focusing.	•	•
	Fine Focusing Scale 0.002mm, Moving Range 25mm, With Safety Stop	•	•
Condenser	N.A.1.25 Abbe Condense, Iris Diaphragm, With Filter Holder, Up/Down Range 25mm, Center Adjustable, With Filter Holder	•	•
Filter	Green	•	•
Light Source	Halogen Lamp 12V/20W, Brightness Adjustable	•	•

Note: "•" In Table Is Standard Outfits

Items	A12.1010 Laboratory Biological Microscope Optional Accessories	
Eyepiece	Wide Field WF15x/16mm, Eyepiece Tube Dia.30mm	A51.1002-15B
	Wide Field WF20x/12mm, Eyepiece Tube Dia.30mm	A51.1002-20B
Objective	Infinity Plan Achromatic 20x	A52.1008-20
	Infinity Plan Achromatic 60x	A52.1008-60
Nosepiece	Backward Quintuple Nosepiece	A54.1001-5
Illumination	Kohler Illumination	A56.1005-5
Adapter	Photo Adapter	A55.1008
	C-Mount 0.4x	A55.1009-04
	C-Mount 0.5x	A55.1009-05
Dark Field	Dark Field Condense, Dry	A5D.1012-D
	Dark Field Condense, Immersion	A5D.1012-I
Polarizing	Simple Polarizing Kit	A5P.1005
Phase Contrast	Phase Contrast Set	A5C.1006
Fluorescent	EPI-Fluorescent Kit	A5F.1005

# A12.1018

## Laboratory Biological Microscope

OPTO-EDU



Swing –Out Condenser N.A.0.9/0.25

Infinity Optical System Supply High Quality Optical Image  
Eyepiece EW10x/22mm, Eyepiece Tube Dia.30mm  
Swing Condenser N.A.0.95/0.25  
External Illumination, Aspherical Collector, Halogen Lamp 6V30W  
Full Line of Dark Field, Phase Contrast, Polaring, Fluorescent Attachment

## Product Specification

A12.1018 Laboratory Biological Microscope	
Optical System	Infinity Plan Optical System
Function	Bright Field, Optional Dark Field, Polarizing, Phase Contrast, Fluorescent
Head	Seidentopf Trinocular Head, 30° Inclined, 360° Rotatable, Interpupillary 48~75mm, Left Eyepiece Tube Diopter Adjustable
Eyepiece	Extra Wide Field Eyepiece EW10x/22mm, Eyepiece Tube Dia.30mm
Nosepiece	Backward Quintuple Nosepiece, With Slide Slot
Objective	Infinity Plan Achromatic Objective 4x,10x,40x,100x
Focusing	Coaxial Coarse & Fine Adjustment, Focusing Range 24mm, Fine Division 0.001mm, Coarse Stroke 37.7mm
Working Stage	Double Layer Mechanical Stage, 185*142mm, Moving Range 55*75mm
Condenser	Swing Out Condenser N.A.0.9/0.25
Illumination	Halogen Lamp 6V30W, External Kohler Illumination, With Aspherical Collector, Brightness Adjustable
Filter	Green, Blue
Adapter	Trinocular Adapter + Eyepiece Tube Photo Adapter Dia.23.2mm



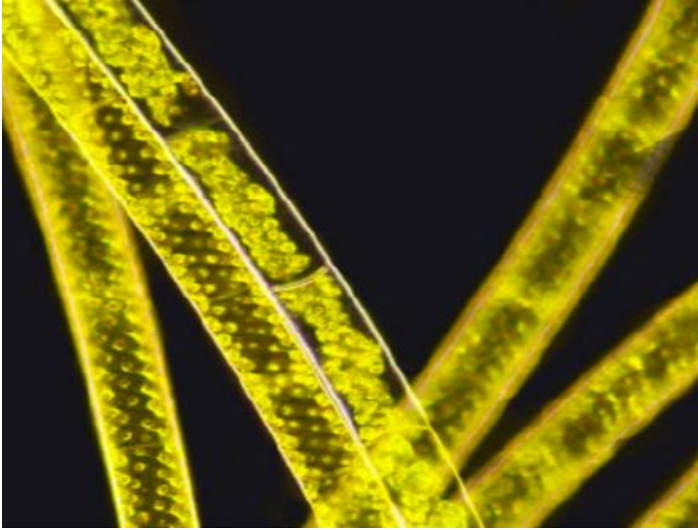
# Optional Accessories

A12.1018 Optional Accessories		
Head	Seidentopf Binocular Head, 30° Inclined, Interpupillary 48~75mm	A53.1003-7
	Upgrade to Tilting Binocular Head 5°~35°	A53.1005-3
	Upgrade to Tilting Trinocular Head 5°~35°	A53.1005-4
Eyepiece	Extra Wide Field Eyepiece EW10x/20mm, Eyepiece Tube Dia.30mm	A51.1003-1020
	Extra Wide Field Eyepiece EW20x/12mm, Eyepiece Tube Dia.30mm	A51.1003-2012
	Extra Wide Field Eyepiece EW15x/16mm, Eyepiece Tube Dia.30mm	A51.1003-1516
Objective	Infinity Plan Achromatic Objective 20x	A52.1006-20
	Infinity Plan Achromatic Objective 60x	A52.1006-60
Nosepiece	Sextuple Nosepiece	A54.1001-6
Illumination	Upgrade To Halogen Lamp 24V50W, For Better Dark View	A56.1018-50W
	Upgrade To Halogen Lamp 24V100W, For Better Dark View	A56.1018-100W
Adapter	0.45x C-Mount	A55.1002-45
Dark Field	Dark Field Condenser, N.A. 0.7~0.9, Dry, Use With 40x Or Lower Magnification Objective	A5D.1010-D
	Dark Field Condenser, N.A. 1.25~1.36, Immersion, Use With 100x Objective	A5D.1010-I
	Dark Field Objective, Infinity Plan 100x(Oil)	A5D.1030-3
	Dark Field Objective, Infinity Plan 100x(Oil), With Iris Diaphragm	A5D.1030-4
Phase Contrast	Infinity Plan Turret Phase Contrast Set	A5C.1003-A1
	--Infinity Plan Turret Phase Contrast Condenser	
	--Infinity Plan Phase Contrast Objective 4x,10x,40x,100x	
	--Centering Telescope 10x	
	--Green Filter	A5C.1003-A2
	Infinity Achromatic Turret Phase Contrast Set	
	--Infinity Achromatic Turret Phase Contrast Condenser	
	--Infinity Achromatic Phase Contrast Objective 4x,10x,40x,100x	
--Centering Telescope 10x		
--Green Filter		
Flourescent	EPI-Fluorescent Kit, Upgrade to <a href="#">A16.1028</a>	A5F.1002-BG
	--Power Supplier 220V/110V Interchangeable, Digital Display	
	--100WHBO Ultra Hi-Voltage Spherical Mercury Lamp	
	--Barrier To Resist Ultraviolet Light	
	--Fluorescence Free Oil	
	--Excitation Filter B/G	
	EPI-Fluorescent Kit, Upgrade to <a href="#">A16.1028</a>	A5F.1002-BGVU
	--Power Supplier 220V/110V Interchangeable, Digital Display	
	--100WHBO Ultra Hi-Voltage Spherical Mercury Lamp	
	--Barrier To Resist Ultraviolet Light	
	--Fluorescence Free Oil	
	--Excitation Filter B/G/V/U	
EPI LED Fluorescent Kit, Upgrade To <a href="#">A16.1029</a>	A5F.1004-B	
EPI Light 3W LED 465~475nm, B Excite Filter BP460~490,		
EPI Light 3W LED 525~530nm, G Excite Filter BP510~550	A5F.1004-G	
Polarizing	Polarizing Attachment , Polarizer, Analyzer, Intergrate Device	A5P.1002

# A12.1037

## Laboratory Biological Microscope

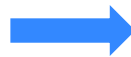
OPTO-EDU



Ergonomic Design Infinity Semi-Plan, Plan Optial System  
WIFI Digital Binocular Head Optional, 5.0M Digital Camera Built-in Support Android, IOS, Win  
Double Layer Mechanical Stage 150x140xmm / 75x52mm  
3W LED Illumination, Brightness Adjustable, Green Filter  
Upgradeable to Dark Field, Fluorescent, Phase Contrast View



A12.1037



A12.1037

**A12.1037 Upgrade To A12.1038**

# Product Specification

A12.1037, A12.1038 Laboratory Microscope		A12.1037		A12.1038	
		-B	-T	-B	-T
Optical System	Infinity Optical System	●	●	●	●
Observation Method	Bright Field	●	●	●	●
	Dark Field	○	○	○	○
	Phase Contrast	○	○	○	○
	Epi-Fluorescence	○	○	○	○
	Polarizing	○	○	○	○
Head	Seidentopf Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm, Eyepiece Tube Dia.23.2mm	●		●	
	Seidentopf Trinocular Head, Inclined 30°, Interpupillary Distance 47-78mm, Eyepiece Tube Dia.23.2mm, Light Split Switchable E0:P100/E100:P0		●		●
	WiFi Digital Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm, Eyepiece Tube Dia.23.2mm 5.0M Digital Camera Built-in, WiFi Transmission Rate 1680p, Support Android, IOS, Windows, Stand-Alone Use, Online Interactives Access.	○	○	○	○
Eyepiece	EW10x/20mm, Diopter Adjustable, Dia.23.2mm	●	●	●	●
Nosepiece	Quintuple Nosepiece, Dovetail Interface	●	●	-	-
	Coded Quintuple Nosepiece, Dovetail Interface	-	-	●	●
Infinity S-Plan Achromatic Objective	4x/0.10, W.D.28mm	●	●	●	●
	10x/0.25, W.D.5.8mm	●	●	●	●
	40x/0.65(S), W.D.0.43mm	●	●	●	●
	100x/1.25(S.Oil), W.D.0.13mm	●	●	●	●
Infinity Plan Achromatic Objective	4x/0.10, W.D.28.0mm	○	○	○	○
	10x/0.25, W.D.10mm	○	○	○	○
	40x/0.65(S), W.D.0.7mm	○	○	○	○
	100x/1.25(S.Oil), W.D.0.18mm	○	○	○	○
Focusing	Coaxial Coarse and Fine Focusing Knob, Left Hand Has Height Limit Function, Right Hand Has Coarse Motion Adjustment Function .Coarse Stroke 37.7mm per Rotation, Fine Division 0.002mm, Fine Stroke 0.2mm per Rotation, Moving Range 20mm	●	●	●	●
Working Stage	Double Layers Mechanical Stage 150x140mm, Moving Range 75x52mm	●	●	●	●
Condenser	Abbe Condenser N.A.1.25	●	●	●	●
Illumination	3W LED Illumination, Brightness Adjustable, Green Filter	●	●	●	●
	Kohler Illumination	○	○	○	○
	LCD Screen Magnification, Brightness, Color Temperature	-	-	●	●
Dark Field	Dark Field Condenser, Dry	○	○	○	○
	Dark Field Condenser, Oil	○	○	○	○
Phase Contrast	Phase Slider For 10x-40x	○	○	○	○
	Phase Slider For 100x	○	○	○	○
Fluorescence	LED Fluorescent Illumination	○	○	○	○
	Mercury Fluorescent Illumination	○	○	○	○
Photo Adapter	1.0x C-Mount	○	○	○	○
	0.5x C-Mount	○	○	○	○
Power Supply	AC 100-240V,50/60Hz	●	●	●	●
	USB Charging Port, Support To Use Exeternal Rechargeable Battery Power Bank, Out Door Freely	○	○	○	○
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, Set Power Off Timer 5 Mins to 8 Hours, And So On.	-	-	●	●
Dimensions	220(W)x290(D)x472(H) mm	●	●	●	●

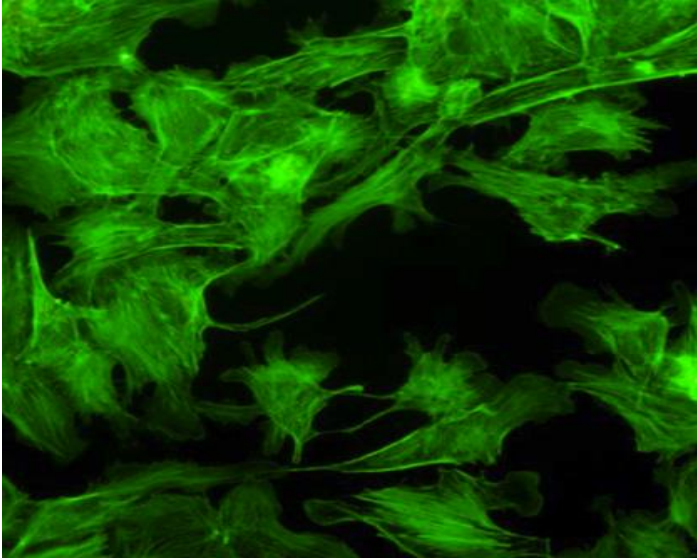
Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable



# A12.1038

## Laboratory Microscope, LCD Screen

OPTO-EDU



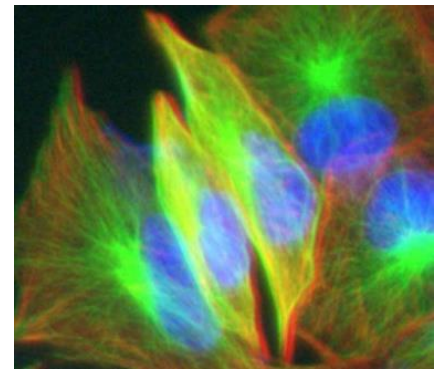
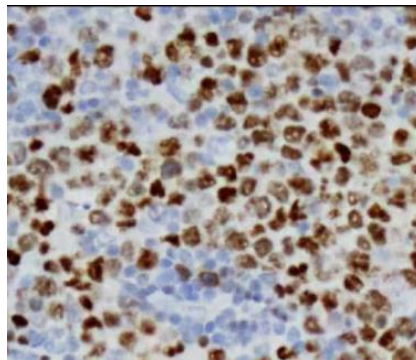
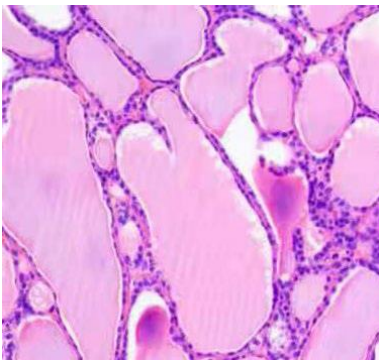
Ergonomic Design Infinity Semi-Plan, Plan Optical System

WiFi Digital Binocular Head Optional, 5.0M Digital Camera Built-in Support Android, IOS, Win

Coding 5 Holes Nosepiece Remember Brightness For Each Objective

LCD Displays Magnification, Brightness, Color Temperature.

Upgradeable to Dark Field, Fluorescent, Phase Contrast View



# Product Specification

A12.1037, A12.1038 Laboratory Microscope		A12.1037		A12.1038	
		-B	-T	-B	-T
Optical System	Infinity Optical System	●	●	●	●
Observation Method	Bright Field	●	●	●	●
	Dark Field	○	○	○	○
	Phase Contrast	○	○	○	○
	Epi-Fluorescence	○	○	○	○
	Polarizing	○	○	○	○
Head	Seidentopf Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm, Eyepiece Tube Dia.23.2mm	●		●	
	Seidentopf Trinocular Head, Inclined 30°, Interpupillary Distance 47-78mm, Eyepiece Tube Dia.23.2mm, Light Split Switchable E0:P100/E100:P0		●		●
	WiFi Digital Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm, Eyepiece Tube Dia.23.2mm 5.0M Digital Camera Built-in, WiFi Transmission Rate 1680p, Support Android, IOS, Windows, Stand-Alone Use, Online Interactives Access.	○	○	○	○
Eyepiece	EW10x/20mm, Diopter Adjustable, Dia.23.2mm	●	●	●	●
Nosepiece	Quintuple Nosepiece, Dovetail Interface	●	●	-	-
	Coded Quintuple Nosepiece, Dovetail Interface	-	-	●	●
Infinity S-Plan Achromatic Objective	4x/0.10, W.D.28mm	●	●	●	●
	10x/0.25, W.D.5.8mm	●	●	●	●
	40x/0.65(S), W.D.0.43mm	●	●	●	●
	100x/1.25(S.Oil), W.D.0.13mm	●	●	●	●
Infinity Plan Achromatic Objective	4x/0.10, W.D.28.0mm	○	○	○	○
	10x/0.25, W.D.10mm	○	○	○	○
	40x/0.65(S), W.D.0.7mm	○	○	○	○
	100x/1.25(S.Oil), W.D.0.18mm	○	○	○	○
Focusing	Coaxial Coarse and Fine Focusing Knob, Left Hand Has Height Limit Function, Right Hand Has Coarse Motion Adjustment Function .Coarse Stroke 37.7mm per Rotation, Fine Division 0.002mm, Fine Stroke 0.2mm per Rotation, Moving Range 20mm	●	●	●	●
Working Stage	Double Layers Mechanical Stage 150x140mm, Moving Range 75x52mm	●	●	●	●
Condenser	Abbe Condenser N.A.1.25	●	●	●	●
Illumination	3W LED Illumination, Brightness Adjustable, Green Filter	●	●	●	●
	Kohler Illumination	○	○	○	○
	LCD Screen Magnification, Brightness, Color Temperature	-	-	●	●
Dark Field	Dark Field Condenser, Dry	○	○	○	○
	Dark Field Condenser, Oil	○	○	○	○
Phase Contrast	Phase Slider For 10x-40x	○	○	○	○
	Phase Slider For 100x	○	○	○	○
Fluorescence	LED Fluorescent Illumination	○	○	○	○
	Mercury Fluorescent Illumination	○	○	○	○
Photo Adapter	1.0x C-Mount	○	○	○	○
	0.5x C-Mount	○	○	○	○
Power Supply	AC 100-240V,50/60Hz	●	●	●	●
	USB Charging Port, Support To Use Exeternal Rechargeable Battery Power Bank, Out Door Freely	○	○	○	○
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, Set Power Off Timer 5 Mins to 8 Hours, And So On.	-	-	●	●
Dimensions	220(W)x290(D)x472(H) mm	●	●	●	●

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable



# A12.0908

## Laboratory Microscope

OPTO-EDU



Trinocular Head 30° Inclined 360° Rotatable Interpupillary Distance 54-75mm  
PL10x22mm Eyepiece Infinity Plan Objective 4x10x20x40x100x  
5 Holes Revolving Nosepiece, Backward  
Double Layer Mechanical Stage 175x145mm Moving 76x50mm  
10W LED, Pre-Centered, Intensity Adjustable.

## Product Specification

A12.0908 Specification		A	B
Optical system	Infinity color corrected optical system	•	•
Head	Compensation Binocular Head 30° Inclined, 360° Rotatable, Interpupillary Distance 54-75mm, Diopter +/-5 Adjustable.	•	-
	Compensation Trinocular Head 30° Inclined, 360° Rotatable, Interpupillary Distance 54-75mm, Splitting Ratio R:T=100:0 or 0:100, Diopter +/-5 Adjustable.	-	•
Eyepiece	High eye-point wide field plan eyepiece PL10x22mm, reticle can be assembled.		



Objective	Infinity Plan Achromatic Objectives 4x ,WD=7.18mm 10x,WD=4.70mm 20x ,WD=1.75mm 40x (Spring),WD=0.72mm 100x (Spring, Oil ),WD=0.15mm	
Nosepiece	5 Holes revolving nosepiece, inward	
Focusing	Coaxial Focus System With Upper Limited And Tension Adjustment; Coarse Range: 25mm; Fine Precision: 0.002mm; Focus Height Adjustable.	
Stage	Double Layer Mechanical Stage 175x145mm, With Special Fabrication Processing, Anti-corrosive And Anti-friction; X/Y Moving Hand Wheel In Right Or Left Hand; Moving Range 76x50mm, Precision 0.1mm	
Condenser	N.A.1.2/0.22 Swing-out Type Achromatic Condenser	
Light Source	6V/30W Halogen, Pre-centered, Intensity Adjustable.	
Filter	Blue	
<b>Optional Accessories</b>		
Eyepiece	High Eye-point PL10x/22mm with Micrometer, Diopter Adjustable	A51.0905-1022R
	High Eye-point PL15x/16mm	A51.0903-1516
Objectvie	Infinity plan achromatic objectives 2x	A52.0902-2
Nosepiece	4 Holes revolving nosepiece, inward	A54.0930-BS4
Phase Contrast Attachment	Infinity Plan Phase Contrast Objectives 10X,WD=4.70mm	A5C.0937-10
	Infinity Plan Phase Contrast Objectives 20X,WD=1.75mm	A5C.0937-20
	Infinity Plan Phase Contrast Objectives 40X,WD=0.72mm	A5C.0937-40
	Infinity Plan Phase Contrast Objectives 100X,WD=0.15mm	A5C.0937-100
	N.A.1.25 Five Holes Phase Contrast Condenser (Infinity) Centering Telescope	A5C.0912-PCI A5C.0910-30
Polarizing Attachment	Polarizer (ø45), Can Be Out Of Light Path.	A5P.0923-P
	Analyzer 360° Rrotatable,Can Be Out Of Light Path.	A5P.0923-A
	λ Slide	A5P.0923-C1
	Rotatable Working Stage	A5P.0923-RW
Dark Field Condenser	N.A.0.9 Dry	A5D.0912-D
	N.A.1.25 Immersion	A5D.0912-W
Reflected Fluorescence System	6-Holes Disc Reflected Fluorensent Illumination Mercury Lamp House 100W/DC Mercury Lamp Power 100V-240V AC With Indicator Display Eye Protecting Board	A12.0908 + Fluorescent Upgrade to <a href="#">A16.0908</a>
	HBO Ultra Hi-Voltage Spherical Mercury Lamp 100W/DC OSRAM Fluorescence Filter System B Fluorescence Filter System G	A12.0908 + Fluorescent + CCD Camera Upgrade to <a href="#">A16.0909</a>
	Fluorescence Filter System UV Fluorescence Filter System V	A5F.0923-V1
	Yellow Filter, Dia.45mm	A56.0935-XY Y
	Green Filter, Dia.45mm	A56.0935-XY G
	Netural Filter, Dia.45mm	A56.0935-XY G
	Attenuation Plate, Transmission 25%	A5F.0925-50R
Photo Adapter	Photo Adapter With PK or MD Mount, Including 3.2X Photo Eyepiece	A55.0901-4
CCD Adapter	1x C-Mount, Focus Adjustable	A55.0926-10
	0.50x, For 1/2" C-Mount, Focus Adjustable	A55.0926-50
	0.67x, For 2/3" C-Mount, Focus Adjustable	A55.0926-67
Series of Microscope	Metallurgical Microscope	<a href="#">A13.0909</a>
	Polarizing Microscope	<a href="#">A15.0908</a>
	Fluorescence Microscope, APO	<a href="#">A16.0908</a>
	Digital Fluorescence Microscope, APO	<a href="#">A16.0909</a>

# A12.0910

## Biological Microscope, APO

OPTO-EDU



Trinocular, PL10x/25, Sextuple Nosepiece Bright Field, Infinity Plan Semi-APO Fluorescent 4x,10x,20x,40x, 100x, Double Mechanical Stage 187\*166mm, Moving Range 85\*55mm, Swing-Out Condenser N.A.0.9, 12V100W Halogen

### A12.0910 Biological Microscope, APO

Optical System	Infinity Optical System, Semi-Aprochromatic
Head	Trinocular Head, 30°inclined, Inverted Image, Interpupillary Distance 50~76mm, Three Split Ratio 0:100; 20:80; 100:0
Eyepiece	High-Eyepoint Plan Eyepiece PL10X/25mm, Diopter Adjustable
Nosepiece	BF Sextuple Nosepiece, With Socket For DIC
Objective	Infinity Plan Semi-Aprochromatic Fluorescent Objective: 4x/0.13, W.D.=16.43mm 10x/0.3, W.D.=8.13mm 20x/0.5, W.D.=2.03mm 40x/0.75, W.D.=0.74mm 100x/1.3, W.D.=0.18mm
Working Stage	Double Layer Mechanical Stage, 187*166mm, Moving Range 80*55mm, Precision 0.1mm, Double Direction Transmission, Left And Right Position Handle For Option. Tension Of The Torque Adjustable.
Focusing	Coaxial Focus System With Upper Limited And Tension Adjustment, Coarse Adjustment Range:25mm, Fine Adjustment Precision: 0.001mm.
Condenser	Swing-Out Achromatic Condenser, N.A.0.9
Light Source	12V100W Halogen Lamp, Center Adjusted, Adopt Digital Dimming System, With LED Indicator, With The Frction Of Light Set And Reset
Power	100-240V Built-in Wideband Voltage Transformer,

### A12.0910 Biological Microscope Optional Accessories

Eyepiece	High-eyepoint Plan eyepiece PL10X/26.5mm,diopter adjustable	A51.0904-10265T
	High-eyepoint Plan eyepiece PL10X/25mm,diopter adjustable, with micrometer	A51.0905-1025Tr
Head	Trinocular Head, 30°inclined, Erect Image, Interpupillary Distance 50~76mm, Three Split Ratio 0:100; 20:80; 100:0	A53.0913-E
Nosepiece	BF Septuple Nosepiece, With Socket For DIC	A54.0930-R7
	BF Quintuple Nosepiece, With Socket For DIC	A54.0930-R5
Adapter	C-Mount 0.5x, Focusable	A55.0930-05
	C-Mount 0.65x	A54.0930-65
Fluorescence	<a href="#">A16.0910 Fluorescence Microscope, APO</a>	A16.0910
Metallurgical	<a href="#">A13.0910 DIC Metallurgical Microscope, APO</a>	A13.0910

# A13.2602

## Inverted Metallurgical Microscope

**OPTO-EDU**



Classical Best Compact & Economical Inverted Metallurgical Microscope!  
 Quadruple Nose With Metallurgical LWD Infinity Plan Objective  
 Mechanical Working Stage 180x180mm Moving Range 30x30mm  
 3W LED Standard Light Source, 12V20W Halogen Optional  
 Eyepiece Micrometer + Stage Micrometer For Measuring Function Optional

### Product Specification

Items	A13.2602 Inverted Metallurgical Microscope Specification	-A	-B	Cata. No.
Head	Monocular Head Inclined 45°, Rotatable 360°	●		A53.2631-M
	Seidentopf Binocular Head Inclined 45°, Rotatable 360°, Interpupillary Distance 48-75mm		●	A53.2631-B
Eyepiece	WF10x/18mm	●	●●	A51.2602-1018
	WF10x/18mm With Micrometer X-0.1mm*180 Div / Y-Single Line, Diopter Adjustable	○	○	A51.2605-1018D
Nosepiece	Quadruple	●	●	A54.2610-N704R
Metallurgical LWD Infinity Plan Objectives	LPL 5x/0.13, W.D.=16.04mm	●	●	A5M.2633-5
	LPL 10x/0.25, W.D.=18.48mm	●	●	A5M.263310
	LPL 20x/0.40, W.D.=8.35mm	○	○	A5M.2633-20
	LPL 50x/0.70, W.D.=1.95mm	●	●	A5M.2633-50
	LPL 80x/0.80, W.D.=0.85mm	○	○	A5M.2633-80
	LPL 100x/0.90(Dry), W.D.=1.00mm	○	○	A5M.2633-100
Working Stage	Stage Size 180x180mm, Travel Range 30x30mm, Round Plate Size Dia.110mm	●	●	A54.2601-MP100
	Round Plate With Oval Hole	○	○	A54.2601-MD400
Light Source	3W LED Lamp, Wide Voltage: 100V-240V	●	●	A56.2612-3W
	12V 20W Halogen Lamp, Wide Voltage: 100V-240V	○	○	A56.2650-20W
Filter	Blue, Dia.32mm	●	●	A56.2616-32B
	Green, Dia.32mm	●	●	A56.2616-32G
	Grey, Dia.32mm	●	●	A56.2616-32N
Micrometer	Division 0.01mm	○	○	A58.2001-901
Package	Carton Size 437*268*522mm, 1 Unit/Ctn			
Weight	Gross Weight 8.0kgs, Net Weighth 7.0kgs			

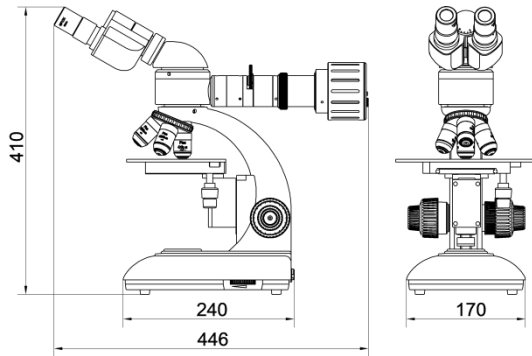
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories.



# A13.2603

## Metallurgical Microscope

**OPTO-EDU**

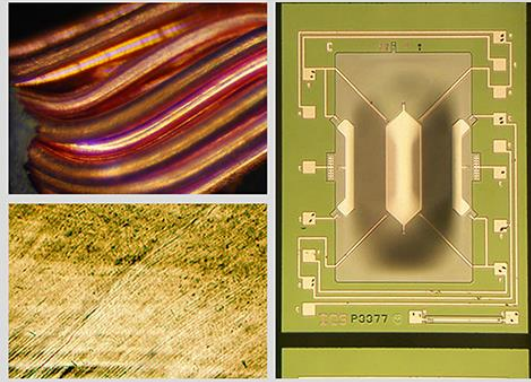


Entry Level Economical High Quality Upright Metallurgical Microscope  
 Wide Field Eyepiece WF10x/18mm + Reticle Eyepiece With Micrometer 0.1mm  
 Metallurgical LWD Infinity Plan Objective 5x,10x,20x,50x,80x,100x(Dry) Optional  
 Mechanical Working Stage 200x140mm, Moving Range 76x52mm With No Hole  
 Reflect Light Source 5W LED With Five Holes Filter Disc

Items	A13.2603 Metallurgical Microscope Specification	B	T	Cata. No.
Head	Seidentopf Binocular Head Inclined 30°, Eyetube Rotatable 360°, Interpupillary Distance 48-75mm	●		A53.2601-B
	Seidentopf Trinocular Head Inclined 30°, Eyetube Rotatable 360°, Interpupillary Distance 48-75mm, Light Split Fixed P20/E80		●	A53.2601-T
Eyepiece	WF10x/18mm, High Eyepoint,	●	●	A51.2602-1018
	WF10x/18mm, With Micrometer X-0.1mm*180 Div / Y-Single Line, Diopter Adjustable	●	●	A51.2605-1018D
Nosepiece	Quadruple, Backward	●	●	A54.2610-N03
Metallurgical LWD Infinity Plan Objectives	LPL 5x/0.13, W.D.=16.04mm	●	●	A5M.2633-5
	LPL 10x/0.25, W.D.=18.48mm	●	●	A5M.263310
	LPL 20x/0.40, W.D.=8.35mm	○	○	A5M.2633-20
	LPL 50x/0.70, W.D.=1.95mm	●	●	A5M.2633-50
	LPL 80x/0.80, W.D.=0.85mm	○	○	A5M.2633-80
	LPL 100x/0.90(Dry), W.D.=1.00mm	○	○	A5M.2633-100
Working Stage	Double Layer Mechanical Stage Size 200x140mm, Travel Range 76x52mm	●	●	A54.2601-S03T
Focusing	Coaxial Coarse And Fine Focusing Knobs, Travel Range: 22mm, Scale: 2μm	●	●	
Illumination	Reflect Light Source, 5WLED Warm Lamp, Input Voltage 100V-240V, With Five Holes Filter Disc (Blue, Green, Amber, Grey, Empty)	●	●	A56.2613-12V20W
Polarizing	Analyzer + Polarizer	○	○	A5P.2603-BS
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	A55.2601-B05
	C-Mount 1.0x, Focus Adjustable	○	○	A55.2601-B10
Package	Carton Size 565*310*410mm, 1 Unit/Ctn			
Weight	Gross Weight 9.0kgs, Net Weight 6.0kgs			
Note: "●" In Table Is Standard outfits, "○" Is Optional Accessories.				

# A13.2604 Metallurgical Microscope

**OPTO-EDU**



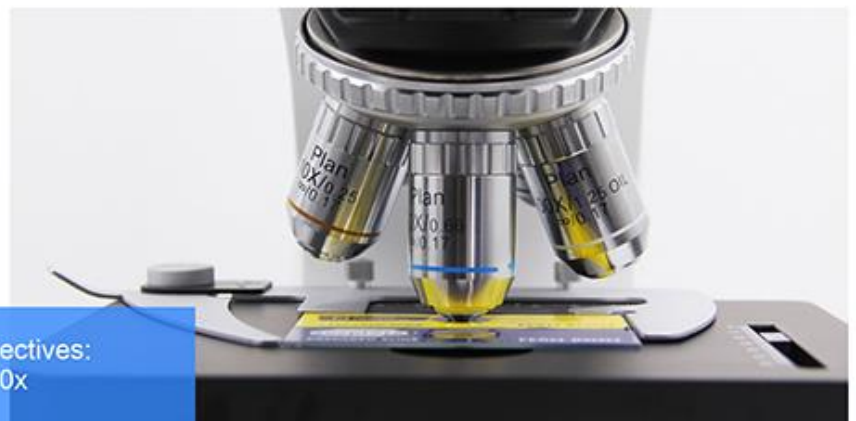
Large Size Trinocular Head Eyepiece Tube Dia.30mm With Light Split Switch E100:P0/E20:P80  
SWF10x/22mm Eyepiece Dia.30mm Diopter Adjustable + Reticle Eyepiece With Micrometer  
Metallurgical LWD Infinity Plan Objective 5x,10x,20x,50x,80x,100x(Dry) Optional

■ Super Wide Field10x/22mm Eyepiece Dia.30mm Diopter Adjustable

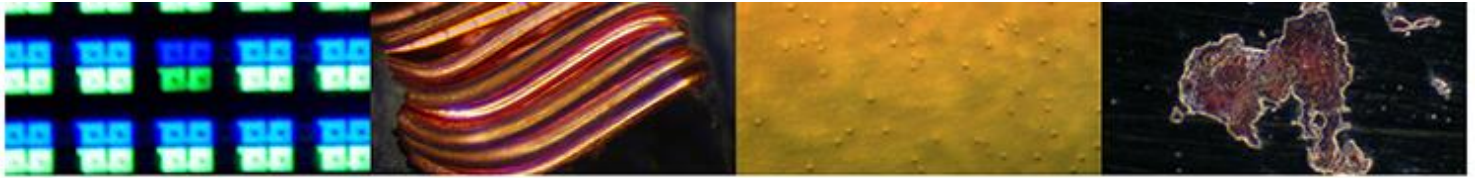


Right Eyepiece With Micrometer  
X-0.1mm\*180 Div / Y-Single Line

■ High Precision Reserved Quintuple, Backward Nosepiece



Metallurgical LWD Infinity Plan Objectives:  
5x, 10x, 20x, 50x; Optional 80x, 100x



Items	Metallurgical Microscope	A13.2604-A Reflect	A13.2604-B Reflect & Transmit	Cata. No.
Head	Seidentopf Trinocular Head Inclined 30°, Rotatable 360°, Interpupillary Distance 48-76mm, Light Split Switch E100:P0/E20:P80, Eyepiece Tube Dia.30mm	●	●	A53.2623-T
Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint, Diopter Adjustable	●	●	A51.2621-1022
	WF10x/22mm, Dia.30mm, With Micrometer X-0.1mm*180 Div / Y-Single Line, Diopter Adjustable	●	●	A51.2622-1022
Nosepiece	Quintuple, Backward	●●	●●	A54.2610-N01
Metallurgical LWD Infinity Plan Objectives	LPL 5x/0.13, W.D.=16.04mm	●	●	A5M.2633-5
	LPL 10x/0.25, W.D.=18.48mm	●	●	A5M.263310
	LPL 20x/0.40, W.D.=8.35mm	●	●	A5M.2633-20
	LPL 50x/0.70, W.D.=1.95mm	●	●	A5M.2633-50
	LPL 80x/0.80, W.D.=0.85mm	○	○	A5M.2633-80
	LPL 100x/0.90(Dry), W.D.=1.00mm	○	○	A5M.2633-100
Working Stage	Double Layer Mechanical Size 200×150mm, Travel Range 77×52mm, Stage Quick Drop-Down Device For Extra 50mm Up/Down Range	●		A54.2601-S01T
	Double Layer Mechanical Size 182×140mm, Travel Range 77×52mm		●	A54.2601-S01T3
Condenser	Abbe N.A.1.25, With Iris Diaphragm		●	A56.2614-01d
Focusing	Coaxial Coarse And Fine Focusing Knobs, Travel Range: 25mm, Scale: 2μm	●		
Illumination	Reflect Light 5W LED Halogen Koehler Illumination, Wide Voltage 100V~240V, Field Diaphragm	●		A56.2612-5W
	Reflect Light 12V50W Halogen Koehler Illumination, Wide Voltage 100V~240V, Field Diaphragm	○		A56.2613-12V50W
	Transmit Light 5W LED Koehler Illumination, Wide Voltage 100V~240V, Field Diaphragm		●	A56.2612-5W
	Transmit Light 6V30W Halogen Koehler Illumination, Wide Voltage 100V~240V, Field Diaphragm		○	A56.26513-6V30W
Polarizing	Analyzer + Polarizer For Reflect Light	●	●	A5P.2603-BKR
	Analyzer + Polarizer For Transmit Light		●	A5P.2603-BKT
Filter	Ground Glass Slider	○	○	A56.2620-F
	Blue Filter Switch Handle	○	○	A56.2620-B
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	A55.2601-75
	C-Mount 1.0x, Focus Adjustable	○	○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm	○	○	A55.2610
Package	Carton Size 520*470*430mm, 1 Unit/Ctn	●		
	Carton Size 570*275*450mm, 1 Unit/Ctn		●	
Weight	Gross Weight 16kgs, Net Weight 12kgs	●		
	Gross Weight 10.5kgs, Net Weight 8.0kgs		●	

Note: "●" In Table Is Standard outfits, "○" Is Optional Accessories.



# A13.2605 Metallurgical Microscope

**OPTO-EDU**



Entry Level Economical High Quality Upright Metallurgical Microscope  
Wide Field Eyepiece WF10x/20mm + Reticle Eyepiece With Micrometer 0.1mm  
Metallurgical LWD Infinity Plan Objective 5x,10x,20x,50x,80x,100x(Dry) Optional  
Mechanical Working Stage 200x150mm, Moving Range 76x52mm With No Hole  
Reflect Light Source 5W LED With Five Holes Filter Disc

Items	A13.2605 Metallurgical Microscope Specification	A	B	Cata. No.
Head	Seidentopf Binocular Head Inclined 30°, Eyetube Rotatable 360°, Interpupillary Distance 48-75mm	●		A53.2621-B
	Seidentopf Trinocular Head Inclined 30°, Eyetube Rotatable 360°, Interpupillary Distance 48-75mm, Light Split Fixed P20/E80		●	A53.2621-T
Eyepiece	WF10x/20mm, High Eyepoint,	●	●	A51.2602-1018
	WF10x/20mm, With Micrometer X-0.1mm*180 Div / Y-Single Line, Diopter Adjustable	●	●	A51.2605-1018D
Nosepiece	Quadruple, Backward	●●	●●	A54.2610-N734
Metallurgical LWD Infinity Plan Objectives	LPL 5x/0.13, W.D.=16.04mm	●	●	A5M.2633-5
	LPL 10x/0.25, W.D.=18.48mm	●	●	A5M.263310
	LPL 20x/0.40, W.D.=8.35mm	○	○	A5M.2633-20
	LPL 50x/0.70, W.D.=1.95mm	●	●	A5M.2633-50
	LPL 80x/0.80, W.D.=0.85mm	○	○	A5M.2633-80
	LPL 100x/0.90(Dry), W.D.=1.00mm	○	○	A5M.2633-100
Working Stage	Double Layer Mechanical Stage Size 200x140mm, Travel Range 76x52mm	●	●	A54.2601-S04T
Focusing	Coaxial Coarse And Fine Focusing Knobs, Travel Range: 22mm, Scale: 2μm	●	●	
Illumination	Reflect Light Source, 5WLED Warm Lamp, Input Voltage 100V-240V, With Five Holes Filter Disc (Blue, Green, Amber, Grey, Empty)	●	●	A56.2613-6V30W
Polarizing	Analyzer + Polarizer	○	○	A5P.2603-BS
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	A55.2601-75
	C-Mount 1.0x, Focus Adjustable	○	○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm	○	○	A55.2610
Package	Carton Size 570*275*450mm, 1 Unit/Ctn			
Weight	Gross Weight 10.5kgs, Net Weight 8.0kgs			

Note: "●" In Table Is Standard outfits, "○" Is Optional Accessories.

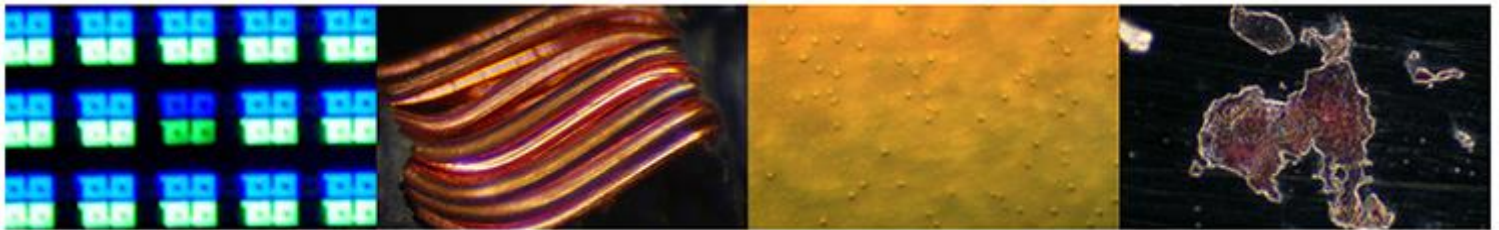
# A13.2606

## Inverted Metallurgical Microscope

OPTO-EDU



Professional Metallurgical Microscope For Bright Field, Dark Field, Polarizing Observation  
Seidentopf Trinocular Head, Light Split Switch E100:P0 / E20:P80  
Metallurgical LWD Infinity Plan BF (Bright Field) & BD (Bright & Dark Field) Objectives  
Large Working Stage Size 210×180mm, Moving Range 50×50mm, Scale 0.1mm  
High Brightness Reflect Light Halogen 12V50W Koehler Illumination



Large Working Stage Size 210×180mm, Moving Range 50×50mm, Scale 0.1mm



Metallurgical LWD Infinity Plan BF (Bright Field) & BD (Bright & Dark Field) Objectives

Items	A13.2606 Invered Metallurgical Microscope	A13.2606	A13.2606-BD	Cata. No.
Head	Seidentopf Trinocular Head Inclined 30°, Interpupillary Distance 48~76mm, Light Split Switch E100:P0 / E20:P80	●	●	A53.2643
Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint, Diopter Adjustable	●	●	A51.2621-1022
	WF10x/22mm, Dia.30mm, High Eyepoint, Diopter Adjustable, With Micrometer X-0.1mm*180 Div / Y-Single Line	●	●	A51.2622-1022
	WF15X/16mm, Dia.30mm, High Eyepoint, Diopter Adjustable	○	○	A51.2621-1516
	WF20X/12mm, Dia.30mm, High Eyepoint, Diopter Adjustable	○	○	A51.2621-2012
Nosepiece	Quintuple	●		A54.2610-N925
	Quadruple(Specially For Bright&Dark Field objectives)		●	A54.2610-N924
Metallurgical LWD Infinity Plan BF (Bright Field) Objectives	LPL 5x/0.13, W.D.=16.04mm	●	○	A5M.2633-5
	LPL10x/0.25, W.D.=18.48mm	●	○	A5M.263310
	LPL 20x/0.40, W.D.=8.35mm	●	○	A5M.2633-20
	LPL 50x/0.70, W.D.=1.95mm	●	○	A5M.2633-50
	LPL 80x/0.80, W.D.=0.85mm	○	○	A5M.2633-80
	LPL 100x/0.90(Dry), W.D.=1.10mm	○	○	A5M.2633-100
Metallurgical LWD Infinity Plan BD (Bright & Dark Field) Objectives	LPL 5x/0.13BD, W.D.=16.04mm		●	A5M.2634-5
	LPL10x/0.25BD, W.D.=18.48mm		●	A5M.2634-10
	LPL 20x/0.40BD, W.D.=8.35mm		●	A5M.2634-20
	LPL 50x/0.70BD, W.D.=1.95mm		●	A5M.2634-50
Working Stage	Stage Size 210×180mm, Moving Range 50×50mm, Scale 0.1mm, Round Plate Size Dia.110mm	●	●	A54.2601-S11T
	Round Plate With Oval Hole	○	○	A54.2601-MD400
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 10mm, Fine Focusing Div. 0.002mm, Fine Stroke Per Rotation 0.2mm	●	●	
Polarizing	Analyzer + Polarizer Set	●	●	A5P.2602
Illumination	Koehler Illumination Halogen 12V/50W, Input Voltage 100V~240V	●	●	A56.2613-12V50W
	Koehler Illumination 5W LED, Input Voltage 100V~240V	○	○	A56.2651-5W
Power	ECO, Auto Power Off System. Power Off Automatically Upon User Leaving 10 Minutes, Power On Automatically Upon User Approaching Detected, This Function Can Be Shut Down Manually	○	○	A56.2660
Filter	Blue, Dia.34mm	●	●	A56.2616-34B
	Green, Dia.34mm	○	○	A56.2616-34G
	Amber, Dia.34mm	○	○	A56.2616-34A
	Grey, Dia.34mm	○	○	A56.2616-34N
Adapter	SLR Digital Camera Adapter For Canon, 100% Light For Camera Portt	○	○	A55.2622-BC
	SLR Digital Camera Adapter For Nikon, 100% Light For Camera Port	○	○	A55.2622-BN
	C-Mount 0.5x, Focus Adjustable	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	A55.2601-75
	C-Mount 1.0x, Focus Adjustable	○	○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm	○	○	A55.2610
Package	Packing Size: 660mmx590mmx325mm			
Weight	Gross Weight: 17 kgs, Net Weight: 12.5 kgs			
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories.				



# A13.2607

## Inverted Metallurgical Microscope

**OPTO-EDU**



Humanized Butterfly Binocular  
Rotatable 360°



Professional Metallurgical Microscope For Bright Field, Polarizing Observation  
Seidentopf Trinocular Head, Light Split E70:P30 No Need Switch  
Metallurgical LWD Infinity Plan BF (Bright Field) Objectives  
Large Working Stage Size 180x155mm, Moving Range 75x40mm, Scale 0.1mm  
High Brightness Reflect Light 5W Warm LED Powered By 5V USB Port

Items	A13.2607 Inverted Metallurgical Microscope	
Head	Swiveling Siedentopf, Inclined 45°, IPD: 48-75mm, Light distribution: 70:30 (70% For Eyepiece, And 30% For Camera Tube)	●
Eyepiece	WF10X/20mm, High Eyepoint	●
	WF10X/20mm, High Eyepoint, Adjustable Focus, Reticule 0.1mm	●
LWD Infinity Plan Objectives	LPL 5× / 0.13, W.D.=16.04mm	●
	LPL 10× / 0.25, W.D.= 18.48mm	●
	LPL 20× / 0.40, W.D.= 8.35mm	●
	LPL 50× / 0.70, W.D.= 1.95mm	●
	LPL 80× / 0.80, W.D.= 0.85mm	○
	LMPlan FL 100× / 0.85(Dry), W.D.= 3.00mm	○
Nosepiece	Quadruple	●
Mechanical Stage	Three-layer Working Stage, Stage size: 180×155mm, Moving Range:75×40mm, Scale: 0.1mm, Round Slide Size: φ110mm	●
Focusing	Coaxial Coarse And Fine, Coarse Stroke: 10mm, Fine Stroke PerRotation: 0.2mm, Fine Division 2 μm.	●
Polarizing Unit	Polarizer, Analyzer	●
Illumination	5WLED Warm Lamp, Input Voltage: 100V ~ 240V	●
Filter	Grey	○
C-mount	0.65×C-Mount, Built-in	●
Holder	Universal Holder for HD Screen	○
HDMI Camera	With Measurement Function	○
HD Screen	10.1"	○

Note: "●" In Table Is Standard outfits, "○" Is Optional Accessories.

Packing Size: 500mm×425mm×305mm Gross Weight:9.0 kgs Net Weight: 7.0 kgs

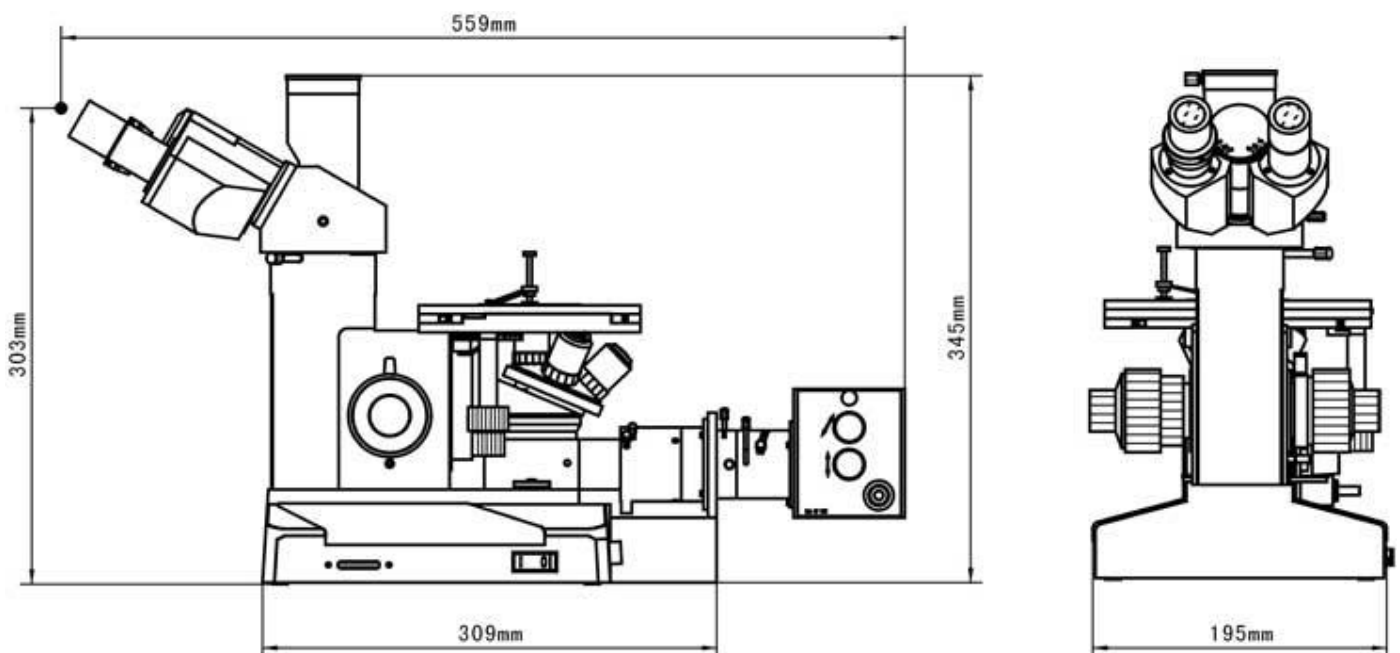
# A13.0201

Inverted Metallurgical Microscope,  
Reflect, Polarizing Optional

**OPTO-EDU**



LWD Plan No Cover Glass Objective PL10x,20x,40x,100x  
Double Layer Mechanical Stage 180x150mm, Moving Range 15x15mm,  
Built-in Round Plate On Working Stage Rotatable For Polarizing View  
Simple Polarizing Set Polarizer & Analyzer Slide Optional  
6V/20W Halogen Kohler Illumination, Brightness Adjustable, With Field Diaphragm, Aperture Diaphragm



## Product Specification

	A13.0201-A1	A13.0201-A2	A13.0201-B1	A13.0201-B2
Head	Binocular	Trinocular	Binocular	Trinocular
Eyepiece	WF10x/18mm			
Objective	LWD Plan (No Cover Glass) PL 10x/0.25		Achromatic (No Cover Glass) 10x/0.25	
	LWD Plan (No Cover Glass) PLL20x/0.40		Achromatic (No Cover Glass) 20x/0.40	
	LWD Plan (No Cover Glass) PLL40x/0.60		S-Plan Achromatic (No Cover Glass) SP40x/0.65	
	LWD Plan (No Cover Glass) PLL100x/1.25 (S,O)		Achromatic (No Cover Glass) 100x/1.25 (S,O)	
Filter	Frosted Filter			
	Blue Filter			
	Green Filter			
	Yellow Filter			
Focusing	Coaxial Coarse & Fine Focus, Tension Adjustable, With Up Stop, Fine Focusing Scale 0.002mm			
Nosepiece	Quadruple, Ball Bearing Inner Locating			
Working Stage	Double Layer Mechanical, Size 180x150mm, Moving Range 15x15mm, With Built-in Round Plate On Working Stage Rotatable For Polarizing View			
Light Source	6V20W Halogen Kohler Illumination, Brightness Adjustable, With Field Diaphragm, Aperture Diaphragm			

## Optional Accessories

Optional Accessories		Cata. No.
Eyepiece	WF16x/11mm	A51.0203-16A
	Dividing 10x, 0.1mm/Div	A51.0205-10
Objective	Plan Long Working Distance (No Cover Glass) PL5x/0.12	A5M.0234-05
	Plan Long Working Distance (No Cover Glass) PLL60x/0.75(Spring)	A5M.0234-60
	Plan Long Working Distance (No Cover Glass) PLL100x/0.85(Spring)	A5M.0234-100A
	Achromatic (No Cover Glass) 60x/0.85	A5M.0232-60
Nosepiece	Quintuple, Ball Bearing Inner Locating	A54.0203-1
Simple Polarizing	Polarizer Slide, 90° Adjustable	A5P.0210-02
	Analyzer Slide	A5P.0211-02
CCD Adapter	0.4x	A55.0202-01
	0.5x	A55.0202-04
	1.0x	A55.0202-02
	0.5x With Dividing 0.1mm/Div	A55.0202-03
Photo Adapter	2.5x/4x Change Over Photograph Attachment With 10x Photo Eyepiece	A55.0201-01
	4x Focusing Photograph Attachment	A55.0201-02
	MD Adapter	A55.0201-03
	PK Adapter	A55.0201-04
	Digital Camera Adapter For Canon EF digital SLR Camera Adapter	A55.0204-02



# A13.0202

## Upright Metallurgical Microscope, Reflect, Polarizing

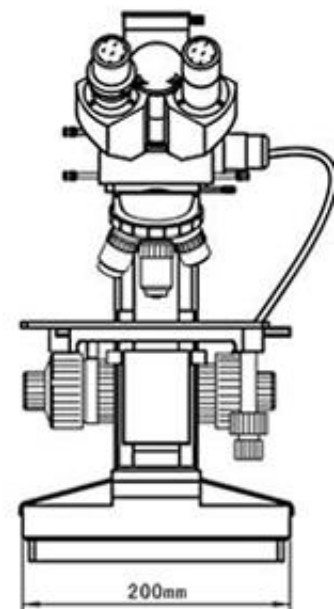
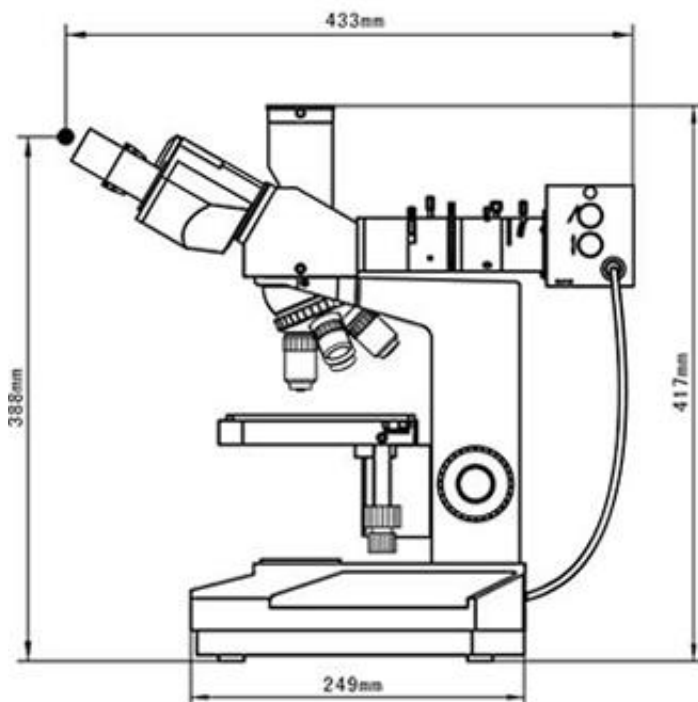
**OPTO-EDU**



Quarduple & Quintuple Nosepiece



LWD Plan No Cover Glass Objective PL5x,10x,20x,40x,60x  
Double Layer Mechanical Stage185x140mm, Moving Range 75x40mm  
Polarizer, Built-in Reflect Light Source, Analyzer Built-in Head  
Coaxial Coarse & Fine Focus, Tension Adjustable, With Up Stop  
Reflect 6V20W Halogen Kohler Illumination,With Field Diaphragm, Aperture Diaphragm



## Product Specification

	A13.0202-A	A13.0202-B
Eyepiece	WF10x/18mm	
Nosepiece	Quadruple, Backward, Ball Bearing Inner Locating	Quintuple, Backward, Ball Bearing Inner Locating
Objective	Plan LWD (No Cover Glass) PL5x/0.12	Plan LWD (No Cover Glass) PL5x/0.12
	Plan LWD (No Cover Glass) PLL10x/0.25	Plan LWD (No Cover Glass) PLL10x/0.25
		Plan LWD (No Cover Glass) PLL20x/0.40
	Plan LWD (No Cover Glass) PLL40x/0.60	Plan LWD (No Cover Glass) PLL40x/0.60
	Plan LWD (No Cover Glass) PL 60x/0.75 (Springl)	Plan LWD (No Cover Glass) PL 60x/0.75 (Spring)
Head	Trinocular, Inclination 30°, Rotatable 360°, With Built-in Analyzer	
Illumination	Reflect Kohler Illumination, 6V20W Halogen Lamp, Brightness Adjustable, With Field Diaphragm, Aperture Diaphragm, With Yellow, Blue, Green Filter And Frosted Filter	
Focusing	Coaxial Coarse & Fine Focus, Tension Adjustable, With Up Stop, Fine Focusing Scale 0.002mm	
Working Stage	Double Layer Mechanical Stage, Size 185x140mm, Moving Range 75x40mm	
Polarizing	Polarizer, Built-in Reflect Light Source	
	Analyzer, Built-in Head, Switchable In/Out Light Path	

## Optional Accessories

	Optional Accessories	Cata. No.
Eyepiece	WF16x/11mm	A51.0203-16A
	Dividing 10x, 0.1mm/Div	A51.0205-10
Objective	Plan LWD (No Cover Glass) PLL50x/0.70	A5M.0212-50
	Plan LWD (No Cover Glass) PLL80x/0.80	A5M.0212-80
	Plan LWD (No Cover Glass) PLL100x/0.85(Spring)	A5M.0212-100
	Plan Achromatic (No Cover Glass) PL100x/1.25	A5M.0234-100
CCD Adapter	0.4x	A55.0202-01
	0.5x	A55.0202-04
	1.0x	A55.0202-02
	0.5x With Dividing 0.1mm/Div	A55.0202-03
Photo Adapter	2.5x/4x Change Over Photograph Attachment With 10x Photo Eyepiece	A55.0201-01
	4x Focusing Photograph Attachment	A55.0201-02
	MD Adapter	A55.0201-03
	PK Adapter	A55.0201-04
	Digital Camera Adapter For Canon EF ditigal SLR Camera Adapter	A55.0204-02

# A13.0204

## Upright Metallurgical Microscope, Reflect, Polarizing

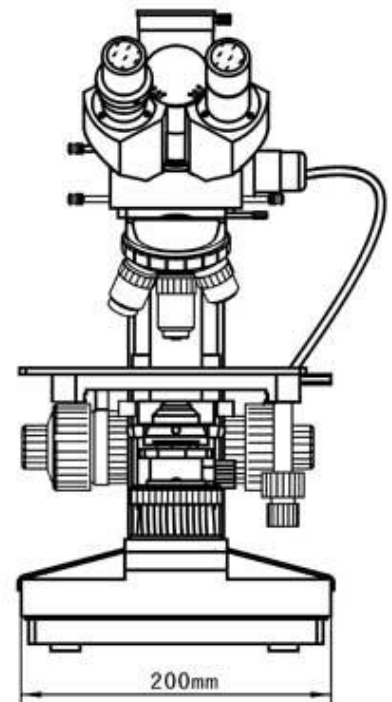
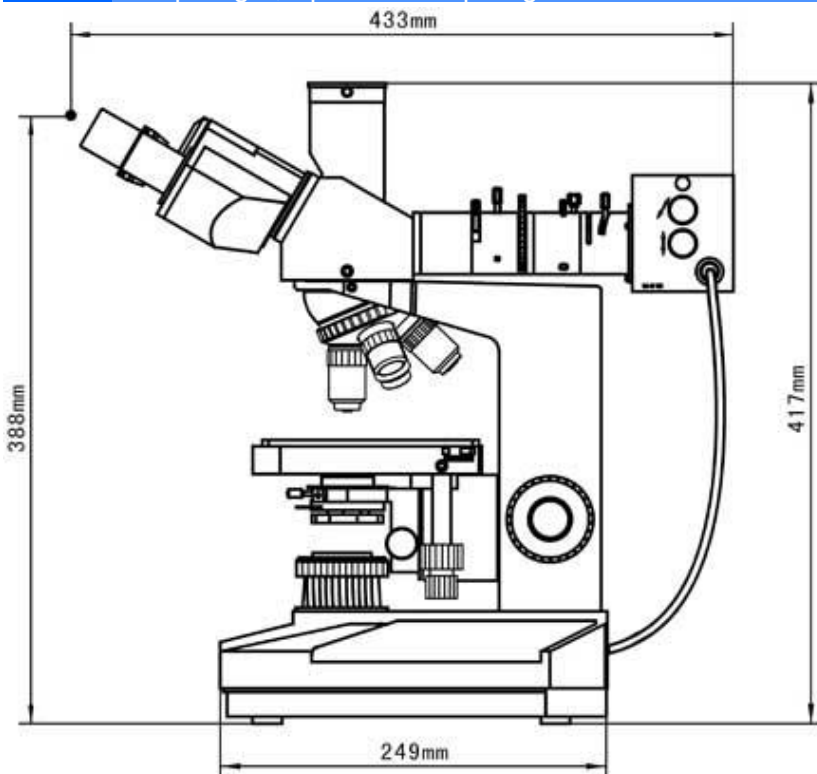
OPTO-EDU



Double Layer Mechanical Stage



LWD Plan No Cover Glass Objective PL5x,10x,20x,40x,60x  
Double Layer Mechanical Stage 185x140mm, Moving Range 75x40mm  
Polarizer, Built-in Reflect Light Source, Analyzer Built-in Head  
Coaxial Coarse & Fine Focus, Tension Adjustable, With Up Stop  
Transmit & Reflect 6V20W Halogen Kohler Illumination, Brightness Adjustable, With Field  
Diaphragm, Aperture Diaphragm





# Product Specification

	A13.0204-A	A13.0204-B
Eyepiece	WF10x/18mm	
Nosepiece	Quadruple, Backward, Ball Bearing Inner Locating	Quintuple, Backward, Ball Bearing Inner Locating
Objective	Plan LWD (No Cover Glass) PL5x/0.12	Plan LWD (No Cover Glass) PL5x/0.12
	Plan LWD (No Cover Glass) PLL10x/0.25	Plan LWD (No Cover Glass) PLL10x/0.25
		Plan LWD (No Cover Glass) PLL20x/0.40
	Plan LWD (No Cover Glass) PLL40x/0.60	Plan LWD (No Cover Glass) PLL40x/0.60
	Plan LWD (No Cover Glass) PL 60x/0.75 (Spring)	Plan LWD (No Cover Glass) PL 60x/0.75 (Spring)
Head	Trinocular, Inclination 30°, Rotatable 360°, With Built-in Analyzer	
Illumination	Reflected Illumination Unit	Reflect Kohler Illumination, 6V20W Halogen Lamp, Brightness Adjustable, With Field Diaphragm, Aperture Diaphragm, With Yellow, Blue, Green Filter And Frosted Filter, Lamp Center Adjustable
	Transmitted Illumination Unit	Abbe Condenser N.A.1.25 Rack & Pinion Adjustable Blue Filter And Frosted Filter Collector For Halogen Lamp 6V 20W Halogen Lamp, Brightness Control
Focusing	Coaxial Coarse & Fine Focus, Tension Adjustable, With Up Stop, Fine Focusing Scale 0.002mm	
Working Stage	Double Layer Mechanical Stage, Size 185x140mm, Moving Range 75x40mm	
Polarizing	Polarizer, Built-in Reflect Light Source	
	Analyzer, Built-in Head, Switchable In/Out Light Path	
Optional Accessories		Cata. No.
Eyepiece	WF16x/11mm	A51.0203-16A
	Dividing 10x, 0.1mm/Div	A51.0205-10
Objective	Plan LWD (No Cover Glass) PLL50x/0.70	A5M.0212-50
	Plan LWD (No Cover Glass) PLL80x/0.80	A5M.0212-80
	Plan LWD (No Cover Glass) PLL100x/0.85(Spring)	A5M.0212-100
	Plan Achromatic (No Cover Glass) PL100x/1.25	A5M.0234-100
CCD Adapter	0.4x	A55.0202-01
	0.5x	A55.0202-04
	1.0x	A55.0202-02
	0.5x With Dividing 0.1mm/Div	A55.0202-03
Photo Adapter	2.5x/4x Change Over Photograph Attachment With 10x Photo Eypiece	A55.0201-01
	4x Focusing Photograph Attachment	A55.0201-02
	MD Adapter	A55.0201-03
	PK Adapter	A55.0201-04
	Digital Camera Adapter For Canon EF Digital SLR Camera Adapter	A55.0204-02

# Product Specification

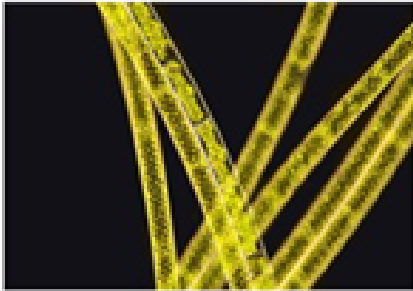
A13.0207 Upright Metallurgical Microscope, BD, DIC, Polarizing		A13.0207	-BD	-DIC	-BDDIC	Cata. No.
Head	Trinocular Head, Inclination 30°, Rotatable 360°, Interpupillary Distance 53~75mm, Light Path Switch E100:P0/E0:P100	●	●	●	●	
Eyepiece	WF10x/22mm	●	●	●	●	
	WF16x/11mm	○	○	○	○	A51.0203-16A
	Dividing 10x, 0.1mm/Div					A51.0205-10
Nosepiece	Quintuple, Ball Bearing Inner Locating	●	●	●	●	
LWD Infinity <b>Bright Field</b> Plan Objective (No Cover Glass)	PLL2.5x/0.07mm, W.D.13mm	○				A5M.0235-2.5
	PLL5x/0.12mm, W.D.26.1mm	●				A5M.0235-5
	PLL10x/0.25mm, W.D.20.2mm	●				A5M.0235-10A
	PLL20x/0.40mm, W.D.8.8mm	●				A5M.0235-20
	PLL40x/0.60mm, W.D.3.98mm, Spring	○				A5M.0235-40
	PLL50x/0.70mm, W.D.3.68mm, Spring	●		●	●	A5M.0235-50
	PLL60x/0.70mm, W.D.3.18mm, Spring	○				A5M.0235-60A
	PLL80x/0.80mm, W.D.1.25mm, Spring	●		●		A5M.0235-80
	PLL100x/0.85mm, W.D.0.4mm, Spring	○				A5M.0235-100
LWD Infinity <b>Bright/Dark Field</b> Plan Objective (No Cover Glass)	PLL5x/0.12 BD W.D.8.05mm		●			
	PLL10x/0.25 BD W.D.7.86mm		●			
	PLL20x/0.40 BD W.D.7.23mm		●			
	PLL50x/0.70 BD W.D.1.75mm		●			
	PLL80x/0.80 BD W.D.0.80mm		●			
LWD Infinity <b>DIC</b> Plan Objective (No Cover Glass)	LMPlan 5x/0.12 WD 15mm			●		A5M.0238-5D
	LMPlan 10x/0.3 WD 10.5mm			●		A5M.0238-10B
	LMPlan 20x/0.4 WD 84.5mm			●		A5M.0238-20A
LWD Infinity <b>DIC Bright/Dark Field</b> Plan Objective	BD LMPlan 5x/0.12mm, W.D.7.9mm				●	A5M.0239-5A
	BD LMPlan 10x/0.3mm, W.D.6.03mm				●	A5M.0239-10A
	BD LMPlan 20x/0.40mm, W.D.1.4mm				●	A5M.0239-20A
DIC	5x/10x/20x DIC Push-Pull Group Slide			●	●	
Working Stage	Double Layer Mechanical Stage, Size 280x270mm, Moving Range 204x204mm	●	●	●	●	
Focusing	Coaxial Coarse & Fine Focus, Tension Adjustable, With Up Stop, Fine Focusing Scale <b>0.7um</b>	●	●			
	Coaxial Coarse & Fine Focus, Tension Adjustable, With Up Stop, Fine Focusing Scale <b>0.8um</b>			●	●	
Reflect Illumination	6V30W Halogen Lamp, Brightness Adjustable	●				
	12V50W Halogen Lamp, Brightness Adjustable		●	●	●	
	Epi Illumination Intergrate Field Diaphragm, Aperture Diaphragm, Filter Switching Device For Yellow, Blue, Green Filter & Ground Glass	●	●	●	●	
Polarizing	Push-Pull Type Polarizer	●	●	●	●	
	Built-in Analyzer And Switching Freely	●	●	●	●	
Adapter	0.4x C-Mount	○	○	○	○	A55.0202-1
	1.0x C-Mount	○	○	○	○	A55.0202-2
	0.5x C-Mount With Dividing 0.1mm/Div	○	○	○	○	A55.0202-3
	0.5x C-Mount	○	○	○	○	A55.0202-4
	Digital SLR Camera Adapter for Canon EF	○	○	○	○	A55.0204-1

Remark: '●' Means Standard Outfit, '○' Means Optional

# A13.0210

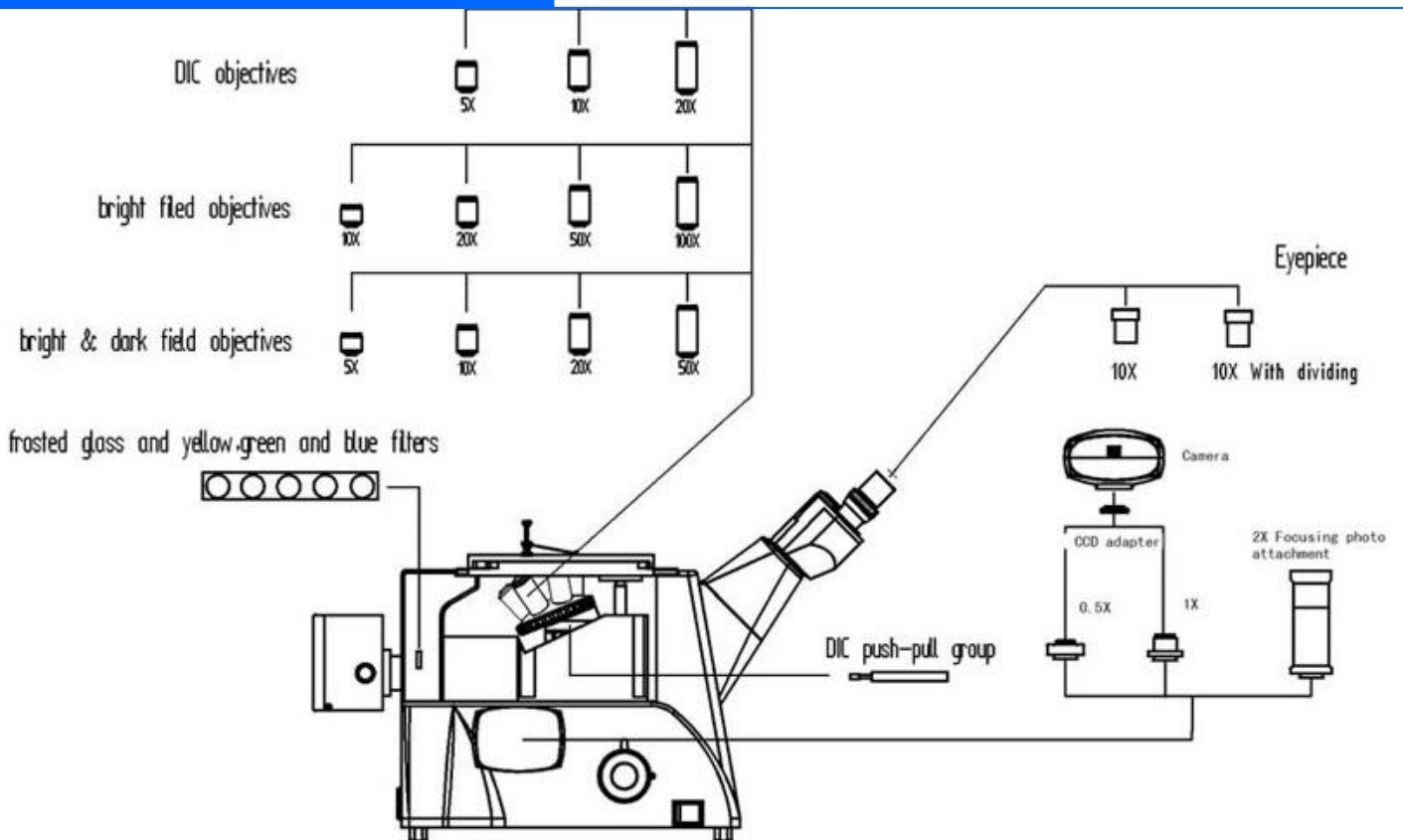
## Inverted Metallurgical Microscope, BF/DF, DIC, Polarizing

OPTO-EDU



Modularization Function Design For BF/DF, DIC, Polarizing View For Metallurgical Lab  
LWD Infinity BD Plan Objective (No Cover Glass) For DIC  
DIC Push-Pull Group Slide For 5x/10x/20x Objective Available  
Epi Illumination Integrate Field Diaphragm, Aperture Diaphragm, Filters Switching Device For Y,B,G And Ground Glass Filters  
Transmit & Reflect Halogen Light Source For Metallurgical Observe

### A13.0210 Diagram





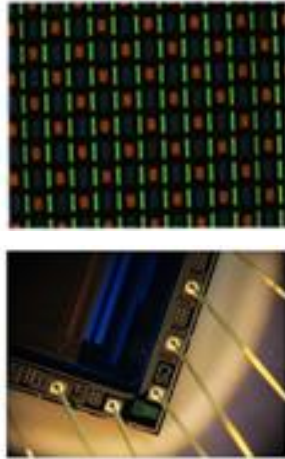
# Product Specification

A13.0210 Inverted Metallurgical Microscope, BD, DIC, Polarizing		A13.0210	-BD	-DIC	- BDDIC	Cata. No.
Head	Binocular Head, Inclination 45°, Interpupillary Distance 53~75mm	•	•	•	•	
Eyepiece	WF10x/22mm,	••	••	••	••	A51.0202-1022
	Dividing WF10x/22mm, 0.1mm/Div	○	○	○	○	A51.0205-G10B
Nosepiece	Quintuple, Ball Bearing Inner Locating	•	•	•	•	
LWD Infinity <b>Bright Field</b> Plan Objective (No Cover Glass)	PLL2.5x/0.07mm, W.D.13mm	○				
	PLL5x/0.12mm, W.D.26.1mm	○				A5M.0235-5
	PLL10x/0.25mm, W.D.20.2mm	•				A5M.0235-10A
	PLL20x/0.40mm, W.D.8.8mm	•				A5M.0235-20
	PLL40x/0.60mm, W.D.3.98mm, Spring	○				A5M.0235-40
	PLL50x/0.70mm, W.D.3.68mm, Spring	•		•		A5M.0235-50
	PLL60x/0.70mm, W.D.3.18mm, Spring	○				A5M.0235-60A
	PLL80x/0.80mm, W.D.1.25mm, Spring	○				A5M.0235-80
PLL100x/0.85mm, W.D.0.4mm, Spring	•				A5M.0235-100	
LWD Infinity <b>Bright/Dark Field</b> Plan Objective (No Cover Glass)	BD PLL5x/0.12mm, W.D.9.7mm		•			A5M.0237-5
	BD PLL10x/0.25mm, W.D.9.3mm		•			A5M.0237-10
	BD PLL20x/0.40mm, W.D.7.2mm		•			A5M.0237-20
	BD PLL40x/0.60mm, W.D.3.0mm, Spring		○			A5M.0237-40
	BD PLL50x/0.70mm, W.D.2.5mm, Spring		•		•	A5M.0237-50
	BD PLL60x/0.75mm, W.D.1.9mm, Spring		○			A5M.0237-60
	BD PLL80x/0.80mm, W.D.0.8mm, Spring		○			A5M.0237-80
	BD PLL100x/0.85mm, W.D.0.22mm, Spring		○			A5M.0237-100
BD PLL100x/0.85mm, W.D.0.40mm, Spring		○			A5M.0237-100A	
LWD Infinity <b>DIC</b> Plan Objective (No Cover Glass)	LMPlan 5x/0.12mm, W.D.15.0mm			•		A5M.0238-5D
	LMPlan 10x/0.3mm, W.D.10.5mm			•		A5M.0238-10B
	LMPlan 20x/0.40mm, W.D.4.5mm			•		A5M.0238-20A
LWD Infinity <b>DIC Bright/Dark Field</b> Plan Objective	BD LMPlan 5x/0.12mm, W.D.7.9mm				•	A5M.0239-5A
	BD LMPlan 10x/0.3mm, W.D.6.03mm				•	A5M.0239-10A
	BD LMPlan 20x/0.40mm, W.D.1.4mm				•	A5M.0239-20A
DIC Observation	5x/10x/20x DIC Push-Pull Group Slide			•	•	
Working Stage	Double Layer Mechanical Stage, Size 242x200mm, Moving Range 30x30mm, Round Rotatable Stage Max Measurement Dia.130mm, Minimum Clear Aperture Less Than Dia.20mm	•	•	•	•	
Focusing	Coaxial Coarse & Fine Focu, With Tension Adjustment And Up Stop, Fine Focusing Minimum Division 2um	•	•	•	•	
Reflect Illumination	6V30W Halogen Lamp, Brightness Adjustable	•				
	12V50W Halogen Lamp, Brightness Adjustable		•	•	•	
	Epi Illumination Intergrate Field Diaphragm, Aperture Diaphragm, Filter Switching Device For Yellow, Blue, Green Filter & Ground Glass	•	•	•	•	
Polarizing	Push-Pull Type Polarizer	•	•	•	•	
	Built-in Analyzer And Switching Freely	•	•	•	•	
Adapter	0.4x C-Mount	○	○	○	○	A55.0202-1
	1.0x C-Mount	○	○	○	○	A55.0202-2
	0.5x C-Mount With Dividing 0.1mm/Div	○	○	○	○	A55.0202-3
	0.5x C-Mount	○	○	○	○	A55.0202-4
	Digital SLR Camera Adapter for Canon EF	○	○	○	○	A55.0204-1

# A13.0211

Upright Metallurgical Microscope,  
Transmit & Reflect,  
BF/DF, DIC, Polarizing

**OPTO-EDU**



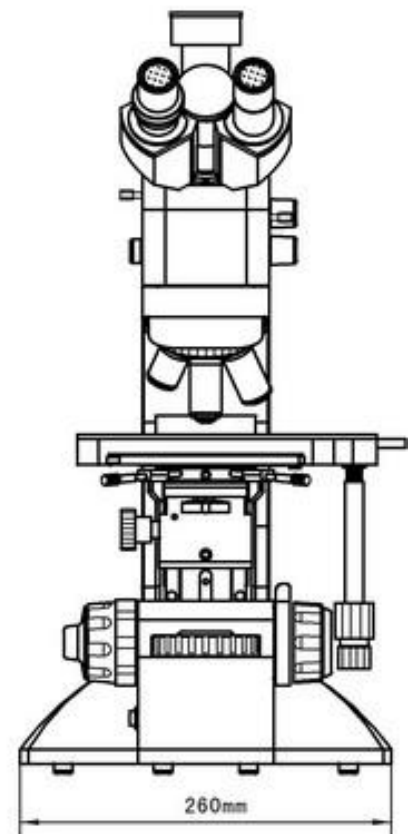
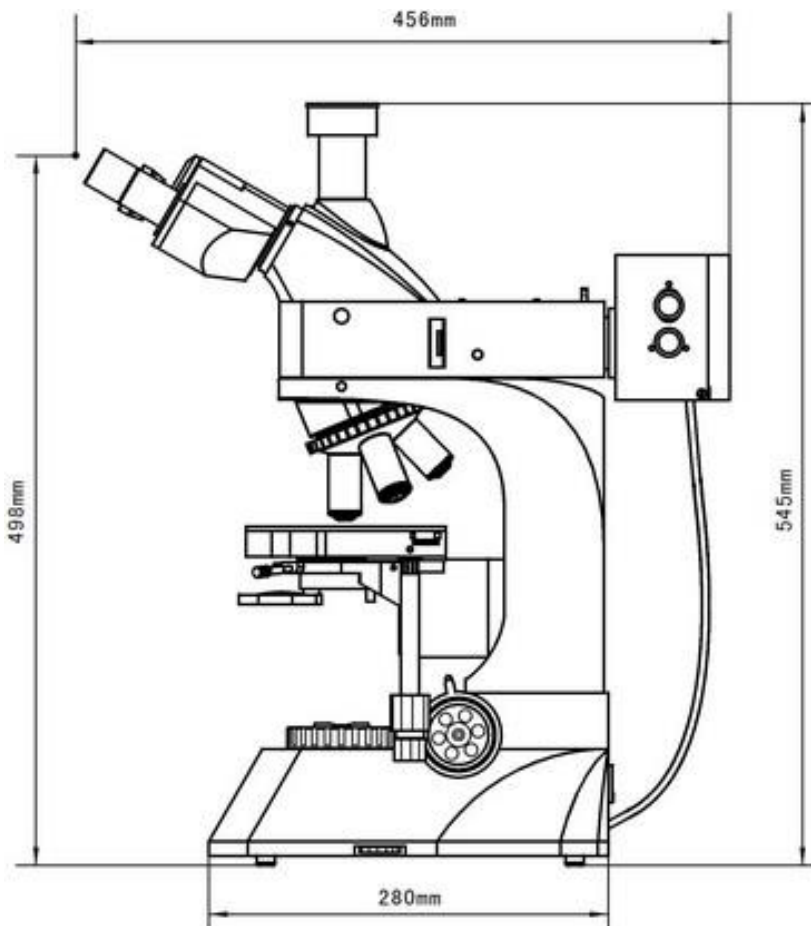
Modularization Function Design For BF/DF, DIC, Polarizing View In Metallurgical Lab

LWD Infinity BD Plan Objective (No Cover Glass) For DIC

DIC Push-Pull Group Slide For 5x/10x/20x Objective

Epi Illumination Integrate Field Diaphragm, Aperture Diaphragm, Filters Switching Device For Y,B,G And Ground Glass Filters

Transmit & Reflect Halogen Light Source For Metallurgical Observe



# Product Specification

A13.0211 Upright Metallurgical Microscope, Transmit & Reflect, BD, DIC, Polarizing		A13.0211	BD	DIC	BDDIC	Cata. No.
Head	Trinocular, Inclination 30°, Rotatable 360°, Interpupillary 53~75mm, Left Side Eyepiece Tube Diopter Adjustable ±5°, Switch E100:P0/E0:P100	●	●	●	●	
Eyepiece	WF10x/22mm,	●●	●●	●●	●●	A51.0202-1022
	Dividing WF10x/22mm, 0.1mm/Div	○	○	○	○	A51.0205-G10B
Nosepiece	Quintuple, Ball Bearing Inner Locating	●	●	●	●	
LWD Infinity <b>Bright Field</b> Plan Objective (No Cover Glass)	PLL2.5x/0.07mm, W.D.13mm	○				A5M.0235-2.5
	PLL5x/0.12mm, W.D.26.1mm	●				A5M.0235-5
	PLL10x/0.25mm, W.D.20.2mm	●				A5M.0235-10A
	PLL20x/0.40mm, W.D.8.8mm	○				A5M.0235-20
	PLL40x/0.60mm, W.D.3.98mm, Spring	●		●	●	A5M.0235-40
	PLL50x/0.70mm, W.D.3.68mm, Spring	○				A5M.0235-50
	PLL60x/0.70mm, W.D.3.18mm, Spring	●				A5M.0235-60A
	PLL80x/0.80mm, W.D.1.25mm, Spring	○				A5M.0235-80
	PLL100x/0.85mm, W.D.0.4mm, Spring	○				A5M.0235-100
LWD Infinity <b>Bright/Dark Field</b> Plan Objective (No Cover Glass)	BD PLL5x/0.12mm, W.D.9.7mm		●			A5M.0237-5
	BD PLL10x/0.25mm, W.D.9.3mm		●			A5M.0237-10
	BD PLL20x/0.40mm, W.D.7.2mm		●			A5M.0237-20
	BD PLL40x/0.60mm, W.D.3.0mm, Spring		●			A5M.0237-40
	BD PLL50x/0.70mm, W.D.2.5mm, Spring		○			A5M.0237-50
	BD PLL60x/0.75mm, W.D.1.9mm, Spring		○			A5M.0237-60
	BD PLL80x/0.80mm, W.D.0.8mm, Spring		○			A5M.0237-80
	BD PLL100x/0.85mm, W.D.0.22mm, Spring		○			A5M.0237-100A
LWD Infinity <b>DIC</b> Plan Objective (No Cover Glass)	LMPlan 5x/0.12mm, W.D.15.0mm			●		A5M.0238-5D
	LMPlan 10x/0.3mm, W.D.10.5mm			●		A5M.0238-10B
	LMPlan 20x/0.40mm, W.D.4.5mm			●		A5M.0238-20A
LWD Infinity <b>DIC Bright/Dark Field</b> Plan Objective	BD LMPlan 5x/0.12mm, W.D.7.9mm				●	A5M.0239-5A
	BD LMPlan 10x/0.25mm, W.D.9.3mm				●	A5M.0239-10A
	BD LMPlan 20x/0.40mm, W.D.1.4mm				●	A5M.0239-20A
DIC Observation	5x/10x/20x DIC Push-Pull Group Slide			●	●	
Working Stage	Double Layer Mechanical Stage, Size 210x140mm, Moving Range 63x50mm	●	●	●	●	
Focusing	Coaxial Coarse & Ffine Focus System, With Tensional Adjustable And Up Stop, Fine Focusing Minimum Division 2um	●	●	●	●	
Transmit Illumination	6V30W Halogen Lamp, Brightness Adjustable	●				
	12V30W Halogen Lamp, Brightness Adjustable		●	●	●	
	Abbe Condenser N.A.=1.25, Rack & Pinion Up/Down Adjustable	●	●	●	●	
	Blue Filter And Ground Glass	●	●	●	●	
	Collector For Illumination With Halogen Lamp (With Filed Diaphragm)	●	●	●	●	
Reflect Illumination	6V30W Halogen Lamp, Brightness Adjustable	●				
	12V50W Halogen Lamp, Brightness Adjustable		●	●	●	
	Epi Illumination Intergrate Field Diaphragm, Aperture Diaphragm, Filter Switching Device For Yellow, Blue, Green Filter & Ground Glass	●	●	●	●	
Polarizing	Push-Pull Type Polarizer	●	●	●	●	
	Built-in Analyzer And Switching Freely	●	●	●	●	
Adapter	0.5x C-Mount	○	○	○	○	A55.0202-4
	1.0x C-Mount	○	○	○	○	A55.0202-2
	0.5x C-Mount With Dividing 0.1mm/Div	○	○	○	○	A55.0202-3
	Adapter For CANON EF Digital SLR Camera	○	○	○	○	A55.0204-1

Remark: '●' Means Standard Outfit, '○' Means Optional



# A13.0212

## Upright Metallurgical Microscope, BF/DF, DIC

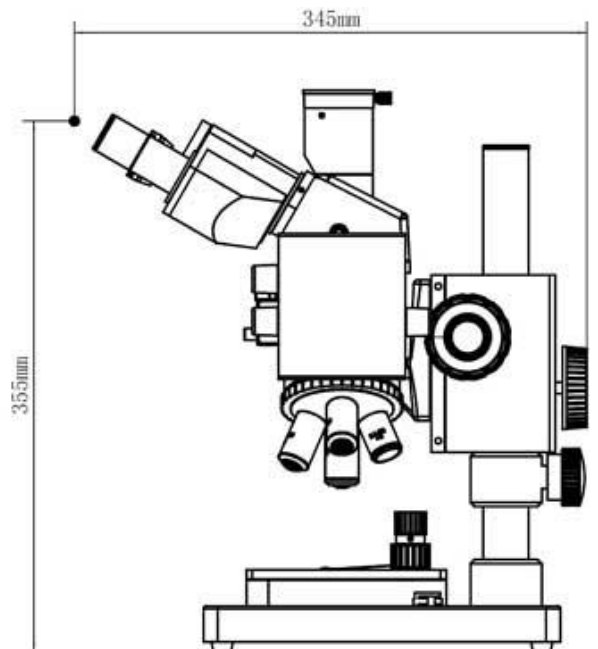
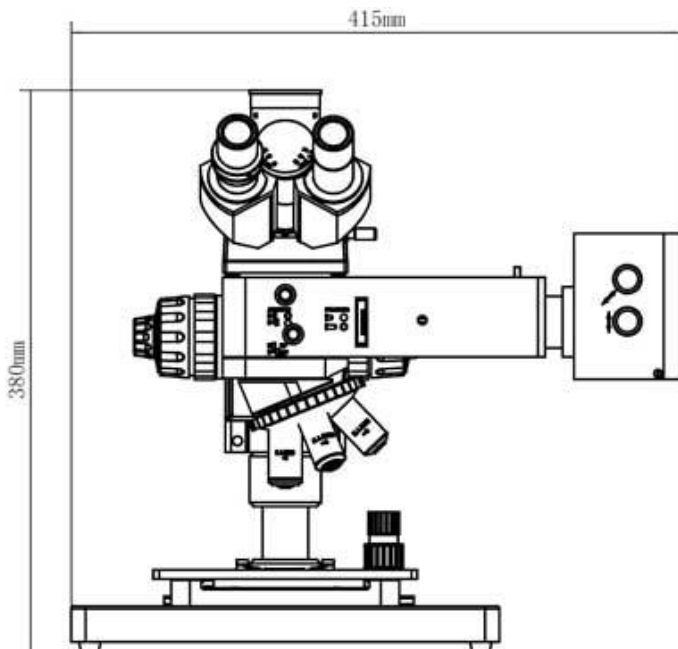
OPTO-EDU



A13.0212

A13.0212, -BD, -BDDIC

Modularization Function Design For BF/DF, DIC, Polarizing View For Metallurgical Lab  
LWD Infinity BD Plan Objective (No Cover Glass) For DIC  
DIC Push-Pull Group Slide For 5x/10x/20x Objective  
Epi Illumination Integrate Field Diaphragm, Aperture Diaphragm, Filters Switching Device For Y,B,G And Ground Glass Filters  
Reflect Halogen Light Source For Metallurgical Observe



# Product Specification

A13.0212 Metallurgical Microscope, BF/DF, DIC, Polarizing		A13.0212-BD	-DIC	-BDDIC	Cata. No.	
Head	Trinocular, Inclination 30°, Rotatable 360°, Interpupillary 53~75mm, Left Side Eyepiece Tube Diopter Adjustable ±5°, Switch E100:P0/E0:P100	●	●	●		
Eyepiece	WF10x/22mm,	●●	●●	●●	A51.0202-1022	
	WF15x/11mm	○	○	○	A51.0203-16A	
	WF20x/11mm	○	○	○	A51.0203-20A	
Nosepiece	Quintuple, Ball Bearing Inner Locating	●	●	●		
LWD Infinity <b>Bright Field</b> Plan Objective (No Cover Glass)	PLL2.5x/0.07mm, W.D.13mm	○				
	PLL5x/0.12mm, W.D.26.1mm	●			A5M.0235-5	
	PLL10x/0.25mm, W.D.20.2mm	●			A5M.0235-10A	
	PLL20x/0.40mm, W.D.8.8mm	●			A5M.0235-20	
	PLL40x/0.60mm, W.D.3.98mm, Spring	○			A5M.0235-40	
	PLL50x/0.70mm, W.D.3.68mm, Spring	●		●	A5M.0235-50	
	PLL60x/0.70mm, W.D.3.18mm, Spring	○			A5M.0235-60A	
	PLL80x/0.80mm, W.D.1.25mm, Spring	○			A5M.0235-80	
PLL100x/0.85mm, W.D.0.4mm, Spring	○			A5M.0235-100		
LWD Infinity <b>Bright/Dark Field</b> Plan Objective (No Cover Glass)	BD PLL5x/0.12mm, W.D.9.7mm		●		A5M.0237-5	
	BD PLL10x/0.25mm, W.D.9.3mm		●		A5M.0237-10	
	BD PLL20x/0.40mm, W.D.7.2mm		●		A5M.0237-20	
	BD PLL40x/0.60mm, W.D.3.0mm, Spring		○		A5M.0237-40	
	BD PLL50x/0.70mm, W.D.2.5mm, Spring		●	●	A5M.0237-50	
	BD PLL60x/0.75mm, W.D.1.9mm, Spring		○		A5M.0237-60	
	BD PLL80x/0.80mm, W.D.0.8mm, Spring		○		A5M.0237-80	
	BD PLL100x/0.85mm, W.D.0.22mm, Spring		○		A5M.0237-100	
BD PLL100x/0.85mm, W.D.0.40mm, Spring		○		A5M.0237-100A		
LWD Infinity <b>DIC</b> Plan Objective (No Cover Glass)	LMPlan 5x/0.12mm, W.D.15.0mm			●	A5M.0238-5D	
	LMPlan 10x/0.3mm, W.D.10.5mm			●	A5M.0238-10B	
	LMPlan 20x/0.40mm, W.D.4.5mm			●	A5M.0238-20A	
LWD Infinity <b>DIC Bright/Dark Field</b> Plan Objective	BD LMPlan 5x/0.12mm, W.D.7.9mm			●	A5M.0239-5A	
	BD LMPlan 10x/0.3mm, W.D.6.03mm			●	A5M.0239-10A	
	BD LMPlan 20x/0.40mm, W.D.1.4mm			●	A5M.0239-20A	
DIC Observation	5x/10x/20x DIC Push-Pull Group Slide			●	●	
Working Stage	Double Layer Mechanical Stage, Size 185x140mm, Moving Range 35x30mm	●	●	●	●	
Stand	Metal Stand 300x240mm	●	●	●	●	
Focusing	Coaxial Coarse & Fine Focu, With Tension Adjustment And Up Stop, Fine Focusing Minimum Division 2um	●	●	●	●	
Reflect Illumination	6V30W Halogen Lamp, Brightness Adjustable	●				
	12V50W Halogen Lamp, Brightness Adjustable		●	●	●	
	Epi Illumination Intergrade Field Diaphragm, Aperture Diaphragm, Filter Switching Device For Yellow, Blue, Green Filter & Ground Glass	●	●	●	●	
Polarizing	Push-Pull Type Polarizer	●	●	●	●	
	Built-in Analyzer And Swithching Freely	●	●	●	●	
Adapter	0.4x C-Mount	○	○	○	○	A55.0202-1
	1.0x C-Mount	○	○	○	○	A55.0202-2
	0.5x C-Mount With Dividing 0.1mm/Div	○	○	○	○	A55.0202-3
	0.5x C-Mount	○	○	○	○	A55.0202-4
	Digital SLR Camera Adapter for Canon EF	○	○	○	○	A55.0204-1

Remark: '●' Means Standard Outfit, '○' Means Optional

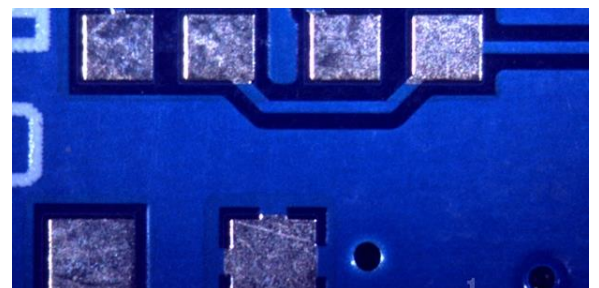
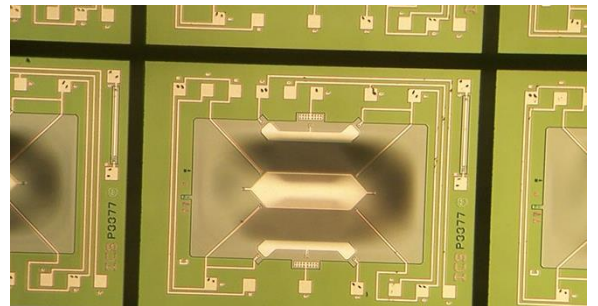
# A13.0900

## Upright Metallurgical Microscope, DIC, APO

OPTO-EDU



Bright Field/Oblique Light, Polarizing, DIC, Transmit Light  
Infinity Color Corrected Optical System  
Long Working Distance Infinity Plan Metallurgical DIC Achromatic/Semi-APO  
4" Double Layer Mechanical Stage, Moving Range 105\*105mm  
Reflect Illumination, With Iris Field Diaphragm and Aperture Diaphragm, Central Adjustable





# Product Specification

A13.0900 DIC Metallurgical Microscope			A	B
Alternative Method Of Observation	Bright Field/Oblique Light, Polarizing, DIC		•	
Optical System	Bright Field/Oblique Light, Polarizing, DIC , Transmit Light			•
Head	Infinity Color Corrected Optical System		•	•
Eyeiece	30° Inclined Trinocular, Splitting Ratio 100:0 or 50:50		•	•
Objective	High Eyepoint Plan PL10x/22mm	LMPL5x/0.15 WD10.8MM	•	•
		Long Working Distance Infinity Plan Metallurgical DIC Achromatic	•	•
		LMPL10x/0.3 WD10MM	•	•
Objective	Long Working Distance Infinity Plan Metallurgical Semi-APO	LMPL20x/0.45 WD4MM	•	•
		LMPL50x/0.55 WD7.8MM	•	•
Nosepiece	Reversed, Quintuple, With DIC Slot		•	•
Stage	4"Double Layer Mechanical Stage, Moving Range 105*105mm, With Metal Flat Stage, Right Hand Position, XY Moving Hand Wheel, with Stage Adaptor		•	
	4"Double Layer Mechanical Stage, Moving Range 105*105mm, With Glass Stage, Right Hand Position, XY Moving Hand Wheel, With Stage Adaptor			•
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focus Range 33mm, Fine Focusing Precision 0.001mm,With Coarse Adjustment Stop and Tightness Adjustment		•	•
Illumination	Reflect Illumination, With Iris Field Diaphragm and Aperture Diaphragm, Central Adjustable, With Filter SLOt and Polarizing Slot, With Oblique Illumination Switch. Single High Power 5W LED, White, Brightness Adjustable		•	•
	Transmitted Illumination, Single High Power 5W LED, White Brightness Adjustable, N.A.0.5 Condenser, with Iris Diaphragm			•
Power	90-240V Wide Voltage, One Way Power Output		•	
	90-240V Wide Voltage, Double Way Power Output			•

# Optional Accessories

A13.0900 DIC Metallurgical Microscope Optional Accessories			
Eyepiece	High Eyepoint Plan PL15x/16mm		A51.0903-1516
	High Eyepoint Plan PL10x/22mm, with Cross PL10x22r,		A51.0905-1022R
	High Eyepoint Plan PL10x/22mm, Diopter Adjustable, PL10x22T		A51.0904-1022T
Objective	Long Working Distance Infinity Plan Metallurgical Semi-APO LMPL100X/0.8 WD2.1MM		A5M.0938-100
DIC	DIC Attachment Set		A5M.0950
Filter	Interface Filter For Reflect Illumination	Blue, <480nm	A5M.0951-B
		Green, 520~570nm	A5M.0951-G
		Red, 630~750nm	A5M.0951-R
		Natural, for White Balance	A5M.0951-LBD
Other	Specimen Presser		A5M.0920
Polarizing	Fixed Polarizer Flashboard, Dia.30mm		A5P.0920-RP
	360° Rotatable Analyser Flashboard		A5P.0920-TA
	Fixed Analyser Flashboard, Dia.30mm		A5P.0920-RA
Adapter	0.5x C-Mount, for 1/2"CCD, Focus Adjustable		A55.0928-50
	1.0x C-Mount, Focus Adjustable		A55.0928-10
	Digital Camera Adapter with Photo Eyepiece		A55.0910



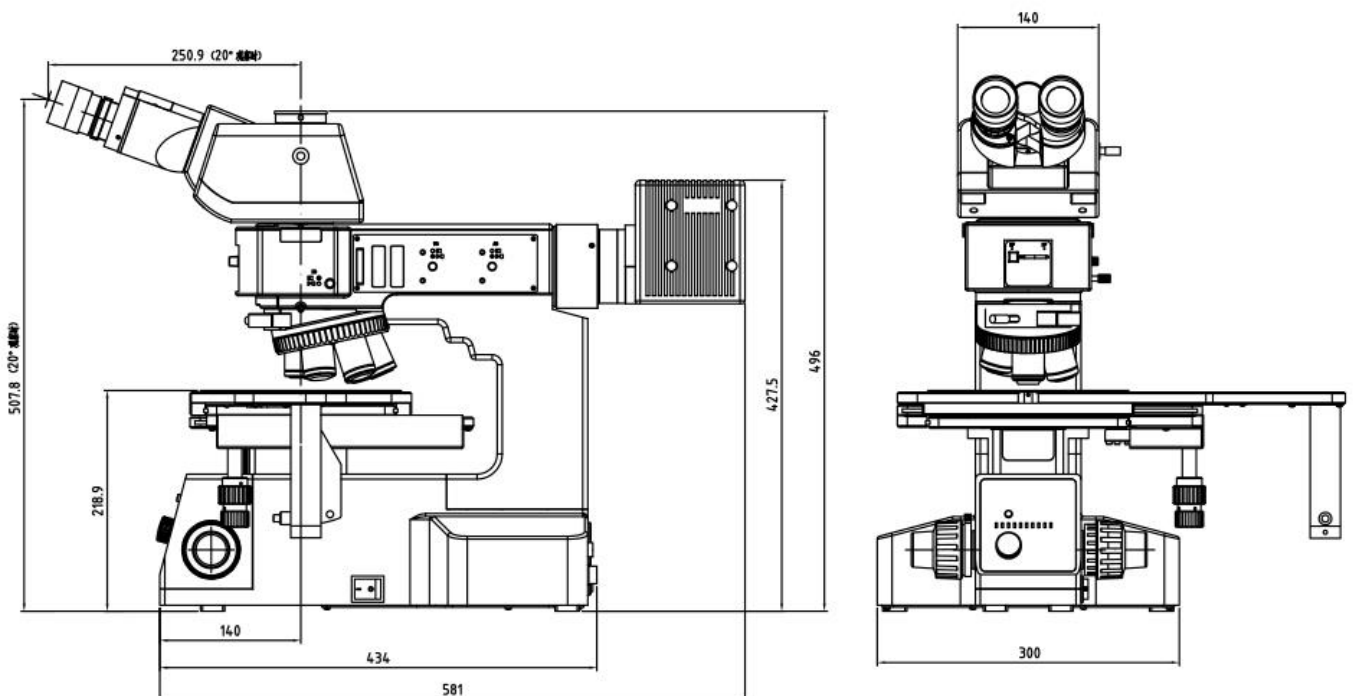
# A13.0901N

Upright Metallurgical Microscope,  
Transmit & Reflect  
BD, DIC, Semi-APO, PL

**OPTO-EDU**

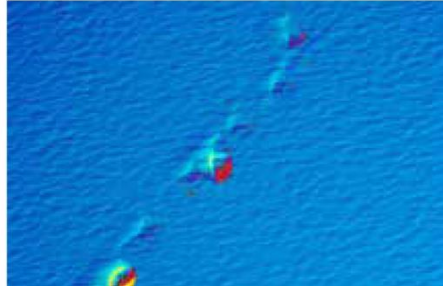
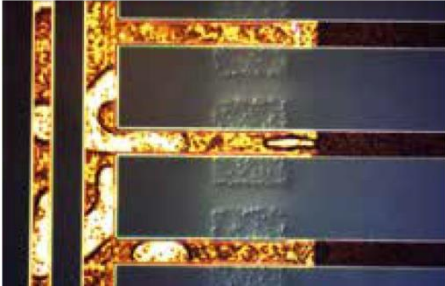


Bright/Dark Field, Polarizing, DIC, Semi-APO View Under Transmit & Reflect Light Source  
5°-35° Tiltable Trinocular Head With Erect Image Light Splitting Ratio Switch E100:P0/E0:P100  
Super Wide Field Plan Eyepiece 10x/25mm, 10x/26.5mm Optional  
LWD Infinity Plan Metallurgical BF/DF DIC & Semi-APO Objectives  
6" Large Working Stage With Moving Range 158x158mm For Reflect & 100x100mm For Transmit Light



## DIC Observation

Based On Orthogonality Polarizing, Insert Nomarski Dic Prism To Match Dic Observation. Using DIC Technology Can Show Obvious Emboss For The Small High-low Difference, Increase The Image Contrast. It Can Match Objectives With Dic Function To Insure The Interference Colors Same Of The Whole Field Of View. Differential Interference Result Is Excellent, And Dic Result Of High Magnification Objectives Is Good As Well.



Conductive Particles 20X DIC

LED Outer Edge 20X DIC

## Product Specification

A13.0901N BD DIC Semi-APO Polarizing Metallurgical Microscope		-R	-RT	Cata. No.
Optical System	Bright Field, Dark Field, Polarizing, DIC, Reflect Light Bright Field, Dark Field, Polarizing, DIC, Transmit & Reflect Light	●		
Head	ETTR 5°-35° Tiltable Trinocular Head, Infinity Sedentopf, Interpupillary Distance 50~76mm, Light Spiltting Ratio Switch E100:P0/E0:P100, Erect Image	●	●	A53.0911-T535
CCD Adapter	0.5x C-Mount, For 1/2"CCD, Focus Adjustable	○	○	A55.0931-05
	0.35x C-Mount, For 1/2"CCD, Focus Adjustable	○	○	A55.0931-35
	0.65x C-Mount, For 1/2"CCD, Focus Adjustable	○	○	A55.0931-65
	1.0x C-Mount, For 1"CCD, Focus Adjustable	○	○	A55.0931-10
Eyepiece	High Eyepoint Plan PL10x/22mm	●●	●●	A51.0903-1022
	High Eyepoint Plan PL10x/22mm With Reticle	○	○	A51.0905-1022R
	High Eyepoint Plan PL10x/22mm, Diopter Adjustable	○	○	A51.0904-1022T
	High Eyepoint Plan PL10x/22mm, Diopter Adjustable, With Reticle			A51.0905-1022RT
	High Eyepoint Plan PL10x/23mm, Diopter Adjustable	○	○	A51.0904-1023T
	High Eyepoint Plan PL15x/16mmPL15x16	○	○	A51.0903-1516
Objective	LWD Infinity Plan Metallurgical <b>BF/DF DIC</b> Objective			
	LMPLAN-BD 5X-DIC LMPL5X/0.15 W.D.9mm	●	●	A5M.0939-5
	LMPLAN-BD 10X-DIC LMPL10X/0.3 W.D.9mm	●	●	A5M.0939-10
	LMPLAN-BD 20X-DIC LMPL20X/0.50 W.D.3.4mm	●	●	A5M.0939-20
	LWD Infinity Plan Metallurgical <b>BF/DF Semi-APO</b> Objective			
	LMPLAN-BD 50x LMPLFL50X/0.55 W.D.7.5mm	●	●	A5M.0940-50
LMPLAN-BD 100x LMPLFL100X/0.80 W.D.2.1mm	○	○	A5M.0940-100	
Nosepiece	Backward, Quintuple For Bright/Dark Field, With DIC Slot	●	●	A54.0930-MX5BD
DIC	DIC Interfere Set	○	○	A5M.0950
Working Stage	6" Three Layer Mechanical Stage, For Transmit & Reflect Light Size 445*240mm, Moving Range For Reflect Light 158*158mm, For Transmit Light 100*100mm, Low Position X/Y Moving Handle, With Glass Plate, With Clutch Handle To Move Quickly In Full Range	●	●	A54.0944-M6RT
	Adapter for 4" Plate, for Reflect Light	○	○	A54.0944-M4A
	Adapter for 4" Plate, for Transmit & Reflect Light	○	○	A54.0944-M4ART
	4" Double Layer Mechanical Stage, For Reflect Light, Low Position Handle, Size 230x215mm, Moving Range For Reflec Light 105*105mm, With Metal Plate, Right Hand Use	○	○	A54.0944-M4
	4" Double Layer Mechanical Stage, For Reflect Light, Low Position Handle, Size 230x215mm, Moving Range For Reflec Light 105*105mm, With Metal Plate, Left Hand Use	○	○	A54.0944-M4N
	4" Double Layer Mechanical Stage, For Transmit & Reflect Light, Low Position Handle, Size 230x215mm, Moving Range For Reflec Light 105*105mm, With Glass Plate	○	○	A54.0944-M4RT
	Rotatable Working Stage 6", For Wafer 4", 5", 6"	○	○	A54.0944-W6



Main Body & Focusing	Reflected Frame: Coaxial Coarse And Fine Adjustment, Coarse Range 33mm, Fine Precision 0.001mm, With Pp-limited Device And Tension Adjustment. Built-in 90-240V Wide Voltage Transformer.	●		
	Transmitted & Reflected Frame: Coaxial Coarse And Fine Adjustment, Coarse Range 33mm, Fine Precision 0.001mm, With Up-limited Device And Tension Adjustment. Built-in 90-240V Wide Voltage Transformer, Transmitted Lamp-house With Single 5W LED. With NA 0.5 Condenser.		●	
Reflect Light	BF/DF Reflect Illumination, With Iris Field Diaphragm and Aperture Diaphragm, Both Central Adjustable, With Filter Slot and Polarizing Slot, With Bright Field/Dark Field Switch, With Bright Intensity Setting And Reset Function On Stand	●	●	A56.0915
	12V100W Halogen Light Box, Pre Centered	●	●	A56.0909-LH
	12V100W Halogen Bulb (Philps 7724)	●	●	A56.0923-12100
	Interference Filter, For Reflect Light, Neutral White	●	●	A5M.0953-LBD
	Interference Filter, For Reflect Light, Blue, <480nm	○	○	A5M.0953-B
	Interference Filter, For Reflect Light, Green, 520~570nm	○	○	A5M.0953-G
Transmit Light	Interference Filter, For Reflect Light, Red, 630~750nm	○	○	A5M.0953-R
	Transmit Illumination, Single High Power 5W LED, Brightness Adjustable, N.A.0.5 Condenser, With Iris Diaphragm		●	
Polarizing For Reflect Light	Fixed Polarizer Flashboard	●	●	A5P.0924-RP
	360° Rotatable Analyzer Flashboard	●	●	A5P.0924-RA360
	Fixed Analyzer Flashboard		○	A5P.0924-RA
Power	90-240V Wide Voltage, One Way Power Output	●		
	90-240V Wide Voltage, Double Way Power Output		●	
Other	Allen Key M3	●	●	
	Allen Key M4	●	●	
	Specimen Presser	○	○	A5M.0920
<b>New Developed Optional Accessories 2020</b>				
Head	Trinocular Head, 30° Inclined, Inverted Image, Interpupillary Distance 50~76mm, Light Split Ratio 0:100; 20:80; 100:0, Support Super Large Wide Field Eyepiece 25mm/26.5mm	○	○	A53.0913-T30
	Trinocular Head, 30° Inclined, Erect Image, Interpupillary Distance 50~76mm, Light Split Ratio 0:100, 100:0, Support Super Large Wide Field Eyepiece 25mm/26.5mm	○	○	A53.0913-T30E
Eyepiece	High Eyepoint Plan PL10x/25mm, Diopter Adjustable	○	○	A51.0904-1025T
	High Eyepoint Plan PL10x/26.5mm, Diopter Adjustable	○	○	A51.0904-10265T
	High Eyepoint Plan PL10x/25mm, Diopter Adjustable, With Reticle	○	○	A51.0905-1025T
	High Eyepoint Plan PL10x/26.5mm, Diopter Adjustable, With Reticle	○	○	A51.0905-10265T
CCD Adapter	0.5x C-Mount, For 1/2"CCD, Focus Adjustable	○	○	A55.0930-05
	0.35x C-Mount, For 1/2"CCD, Focus Adjustable	○	○	A55.0930-35
	0.65x C-Mount, For 1/2"CCD, Focus Adjustable	○	○	A55.0930-65
	1.0x C-Mount, For 1"CCD, Focus Adjustable	○	○	A55.0930-10
Objective	LWD Infinity Plan Metallurgical BF/DF DIC Semi-APO Objective			
	5X/0.15, WD=13.5mm	○	○	A5M.0941-5
	10X/0.30, WD=9mm	○	○	A5M.0941-10
	20X/0.50, WD=2.5mm	○	○	A5M.0941-20
	20X/0.40, WD=8.5mm	○	○	A5M.0941-20A
	50X/0.80, WD=1.0mm	○	○	A5M.0941-50
	100X/0.90, WD=1.0mm	○	○	A5M.0941-100
DIC	Semi-APO Objective With Correcting Ring 50X/0.70, WD=2.3~2.9mm	○	○	A5M.0945-50
	DIC Interfere Set, For BF/DF Semi-APO Objective Objective	○	○	A5M.0952
	DIC Interfere Set, For BF/DF Semi-APO Objective Objective, Olympus Level	○	○	A5M.0952-O

Remark: '●' Means Standard Outfit, '○' Means Optional



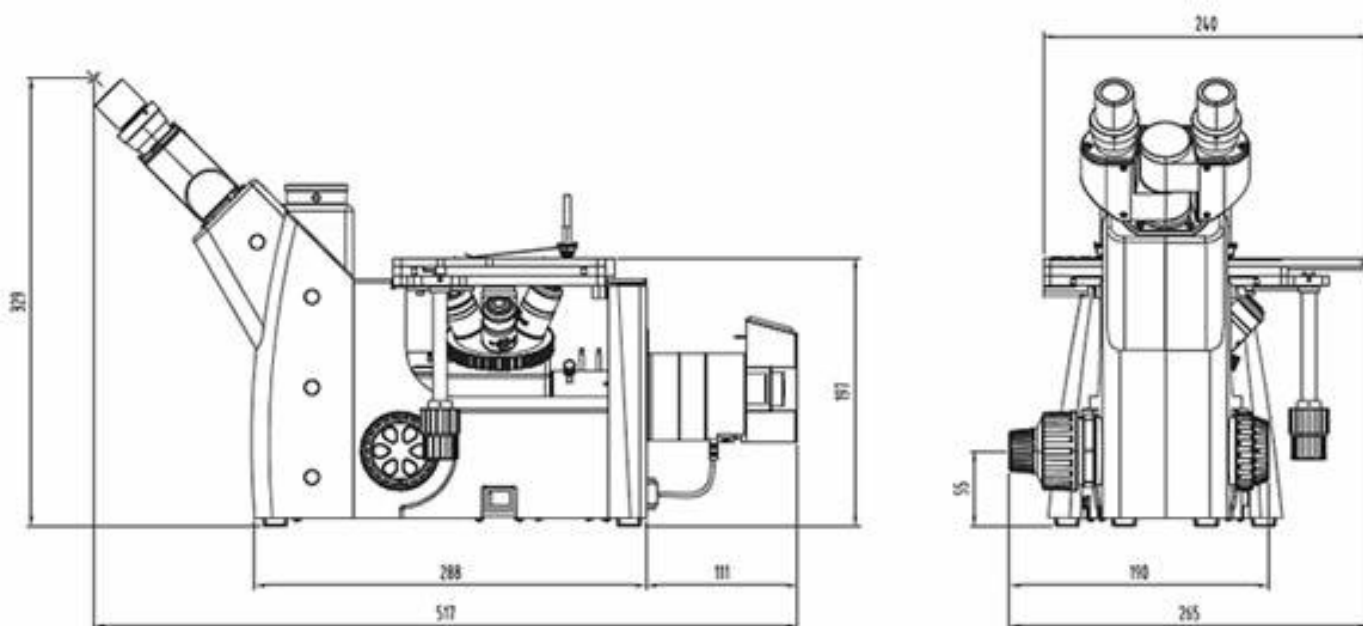
# A13.0905

## Inverted Metallurgical Microscope

OPTO-EDU



Long Working Distance Plan Metallurgical Achromatic, Semi-APO  
Triple Layer Working Stage, Size 180\*155mm, Moving Range 75\*40mm  
Swing-out Condenser N.A.0.7, for Transmit Light  
Reflect Kohler Illumination, with View Field Diaphragm, with Iris Diaphragm, Center Adjustable,  
5W LED, Warm Light, Brightness Control  
Blue Filter, Dia.32mm



## Product Specification

### A13.0905 Metallurgical Microscope

Head	Compensation Free Trinocular Head, 45° Inclined, 360° Rotatable, Interpapillary Distance 54~75mm, Diopter Adjustable, Light Split 8:2	
Eyepiece	High Eyepoint Plan PL10x/18mm,	
Objective	Long Working Distance Plan Metallurgical Achromatic	LMPL5X/0.15
		LMPL10X/0.3
		LMPL20X/0.4
	Long Working Distance Plan Metallurgical Achromatic, Semi-APO	LMPL50X/0.6
Stage	Triple Layer Working Stage, Size 180*155mm, Moving Range 75*40mm	
	Metal Plate, Center Hole Dia.25mm	
	Metal Plate, Center Hole Dia.12mm	
Focusing	Low Position Coaxial Coarse & Fine Focusing, Coarse Focus Range 38mm, Fine Focusing Precision 0.002mm, with Tension Adjustment, with Up-limited Stop	
Condenser	Swing-out Condenser N.A.0.7, for Transmit Light	
Filter	Blue Filter, Dia.32mm	
Illumination	Reflect Kohler Illumination, with View Field Diaphragm, with Iris Diaphragm, Center Adjustable, 5W LED, Warm Light, Brightness Control	
Power	90-240V Wide Range Power Supply	

## Optional Accessories

### A13.0905 Metallurgical Microscope Optional Accessories

Eyepiece	Wide Field Eyepiece WF15x/13mm	A51.0902-1513
	Wide Field Eyepiece WF20x/10mm	A51.0902-2010
	Wide Field Eyepiece WF15x/13mm with Retical	A51.0905-1513R
	Wide Field Eyepiece WF20x/10mm with Retical	A51.0905-2010R
	High Eyepoint Plan PL10x/18mm, with Cross PL10x18	A51.0905-1018PR
Objective	Long Working Distance Infinity Plan Metallurgical Achromatic, Semi-APO LMPL100X/0.8	A5M.0934-100
Filter	Yellow,Dia.32mm	A56.0935-XDY
	Green,Dia.32mm	A56.0935-XDG
	Netural,Dia.32mm	A56.0935-XDF
Polarizing	Polarizer	A5P.0922-P
	Analyser,360° Rotatable	A5P.0922-A
Adapter	1.0x C-Mount	A55.0929-10
	0.5x C-Mount, for 1/2"CCD	A55.0929-50
	Digital Camera Adapter with Photo Eyepiece	A55.0910
	Photo Adapter with 3.2x Photo Eyepiece, PK or MD Mount	A55.0901-4



# A13.0909

## Metallurgical Microscope

OPTO-EDU



Newly Designed Integrative Y Shape Full Metal Body High Stability No Image Dithering Compensation Trinocular Head, 30° Inclined, 360° Rotatable  
LWD Infinity Plan Achromatic Metallurgical Objectives 5x, 10x, 20x, 50x, 100x (Optional)  
Double Layer Mechanical Stage 175x145mm, Moving Range 76\*42mm  
A Reflect Light 5W LED, B Transmit & Reflect Light Both 5W LED



# Product Specification



Newly Designed Integrative Y Shape Body, All Metal Diecasted Under High Pressure, High Stability, No Image Dithering Under High Magnification Observation,

A13.0909 Metallurgical Microscope Specification		A	B
Optical System	Infinity Color Corrected Optical System		
Head	Compensation Trinocular Head, 30° Inclined, 360° Rotatable, Interpupillary Distance 54-75mm, Splitting Ratio R:T=100:0 or 0:100, Diopter +/-5 Adjustable.		
Eyepiece	High Eye-point Wide Field Plan Eyepiece PL10x22mm		
Objective	LWD Infinity Plan Achromatic Metallurgical Objectives		
	5x LMPL5x/0.15, WD10.8mm		
	10x LMPL10x/0.3, WD12.2mm		
	20x LMPL20x/0.45, WD12.2mm		
Nosepiece	5 Holes Revolving Nosepiece, Backward		
	5 Holes Revolving Nosepiece, Backward		
Focusing	Coaxial Focus System With Upper Limited And Tension Adjustment; Coarse Range 25mm; Fine Precision 0.002mm		
Working Stage	<b>For Reflect Light</b> Double Layer Mechanical Stage 175x145mm, Moving Range 76*42mm, X/Y Moving Coaxial Adjustment, With <b>Metal</b> Plate, Up/Down Range Accept <b>78mm</b> High Sample	•	
	<b>For Transmit &amp; Reflect Light</b> Double Layer Mechanical Stage 175x145mm, Moving Range 76*42mm, X/Y Moving Coaxial Adjustment, With <b>Glass</b> Plate, Up/Down Range Accept <b>28mm</b> High Sample		•
Light Source	<b>Reflect Light</b> Lamp House With Single 5W LED, Warm Color, Koehler Illuminator With Oblique Light Device, Center Adjustable Field And Aperture Diaphragm, Interference Filter : Blue <480nm, Green 520~570nm, Red 630~750nm, White Balance	•	•
	<b>Transmit Light</b> Lamp House With Single 5W LED, Warm Color, Filter: Yellow, Neutral, IF550, LBD, Condenser N.A. 0.9 Swing-out Achromatic Condenser For Transmit Light, With Center Adjustable Aperture Iris Diaphragm		•
Power	Wide Range Voltage 100~240V AC 50/60Hz		
Optional Accessories			
Eyepiece	High Eye-point PL10x/22mm with Micrometer, Diopter Adjustable	A51.0905-1022R	
	High Eye-point PL15x/16mm	A51.0903-1516	
Objective	LWD Infinity Plan Achromatic Metallurgical Objectives 100X LMPL100X/0.8, WD2.1mm	A5M.0954-100	
CCD Adapter	1x C-Mount, Focus Adjustable	A55.0926-10	
	0.50x, For 1/2" C-Mount, Focus Adjustable	A55.0926-50	
	0.67x, For 2/3" C-Mount, Focus Adjustable	A55.0926-67	

# A13.0910

## Upright Metallurgical Microscope, BD, DIC, Semi-APO, Polarizing

**OPTO-EDU**



**BF/DF Nosepiece With DIC Slot**

Bright/Dark Field, Polarizing, DIC, Semi-APO View Under Transmit & Reflect Light Source  
 30° Trinocular Head With Erect Image Light Spilting Ratio Switch E100:P0/E0:P100  
 Super Wide Field Plan Eyepiece 10x/25mm, 10x/26.5mm Optional  
 LWD Infinity Plan Metallurgical BF/DF DIC & Semi-APO Objectives  
 4" Large Working Stage With Moving Range 105\*102mm For Reflect & Transmit Light

A13.0910 BD DIC Semi-APO Polarizing Metallurgical Microscope		R	RT	Cata. No.
Optical System	Bright Field, Dark Field, Polarizing, DIC, Reflect Light	●		
	Bright Field, Dark Field, Polarizing, DIC, Transmit & Reflect Light		●	
Head	30° Inclined Erect Image Infinity Gemel Trinocular Head, Interpupillary Distance 50~76mm, Light Spilting Ratio Switch E100:P0/E0:P100,	●	●	A53.0913-T30E
	30° Inclined, Invert Image Infinity Gemel Trinocular Head, Interpupillary Distance 50~76mm; Light Splitting Ratio Switch R:T=100:0 or 20:80 or 0:100	○	○	A53.0913-T30
	5-35° Tiltable, Inverted Image, Infinity Gemel Trinocular Head, Interpupillary Distance 50~76mm; Light Splitting Ratio 50:50 or 100:0 or 0:100	○	○	A53.0913-T535
CCD Adapter	0.5x C-Mount, For 1/2"CCD, Focus Adjustable	○	○	A55.0930-05
	0.35x C-Mount, For 1/2"CCD, Focus Adjustable	○	○	A55.0930-35
	0.65x C-Mount, For 1/2"CCD, Focus Adjustable	○	○	A55.0930-65
	1.0x C-Mount, For 1"CCD, Focus Adjustable	○	○	A55.0930-10
Eyepiece	High Eyepoint Plan PL10x/25mm, Diopter Adjustable	●●	●●	A51.0904-1025T
	High Eyepoint Plan PL10x/26.5mm, Diopter Adjustable	○	○	A51.0904-10265T
	High Eyepoint Plan PL10x/25mm, Diopter Adjustable, With Reticle	○	○	A51.0905-1025T
	High Eyepoint Plan PL10x/26.5mm, Diopter Adjustable, With Reticle	○	○	A51.0905-10265T



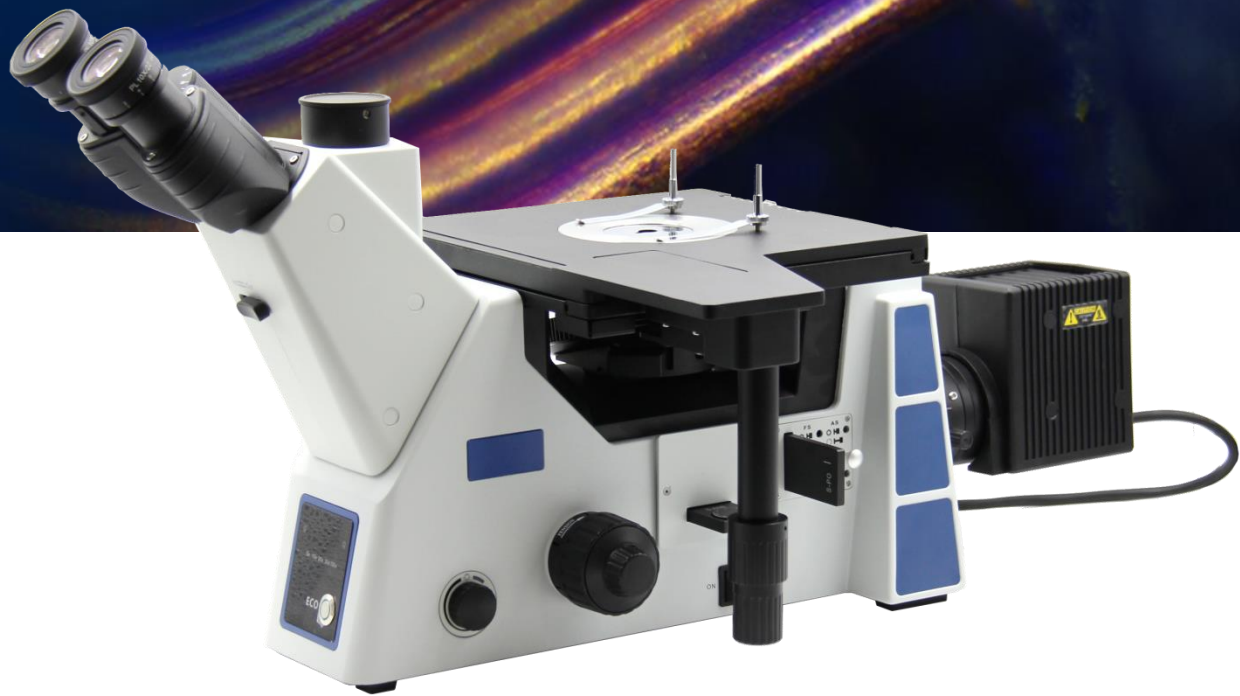
Objective	LWD Infinity Plan Metallurgical BF/DF DIC Semi-APO Objective				
	5x/0.15, W.D.=19.5mm	●	●	A5M.0941-5	
	10x/0.30, W.D.=9mm	●	●	A5M.0941-10	
	20x/0.50, W.D.=2.5mm	●	●	A5M.0941-20	
	20x/0.40, W.D.=8.5mm	○	○	A5M.0941-20A	
	50x/0.80, W.D.=1.0mm	●	●	A5M.0941-50	
	100x/0.90, W.D.=1.0mm	●	●	A5M.0941-100	
	LWD Infinity Plan Metallurgical BF DIC Semi-APO Objective				
	5x/0.15, W.D.=19.5mm	○	○	A5M.0942-5	
	10x/0.30, W.D.=10.9mm	○	○	A5M.0942-10	
	20x/0.50, W.D.=3.20mm	○	○	A5M.0942-20	
	50x/0.80, W.D.=1.20mm	○	○	A5M.0942-50	
	100x/0.90, W.D.=1.0mm	○	○	A5M.0942-100	
	Semi-APO Objective With Correcting Ring 50X/0.70, WD=2.3~2.9mm	○	○	A5M.0945-50	
Nosepiece	BD Sextuple Nosepiece (With DIC Slot)	●	●	A54.0930-RM6BD	
	BD Quintuple Nosepiece (With DIC Slot)	○	○	A54.0930-RM5BD	
	Bright Field Sextuple Nosepiece(With DIC Slot)	○	○	A54.0930-RM6	
	Bright Field Septuple Nosepiece(With DIC Slot)	○	○	A54.0930-RM7	
DIC	DIC Attachment, Apply For BD Objective		○	○	A5M.0952
Working Stage	4" Three Layer Mechanical Stage, For Transmit & Reflect Light Moving Range 102*105mm, Low Position X/Y Moving Handle, With Glass Plate For RT Model, With Metal Plate For R Model	●	●	A54.0947-M4	
	Rotatable Working Stage 4", For Wafer 2", 3", 4"	○	○	A54.0947-W234	
Main Body & Focusing	Reflected Body, Low-Position Coaxial Coarse And Fine Adjustment, Coarse Adjustment Distance: 25mm; Fine Precision: 0.001Mm. With Coarse Adjustment Stop And Tightness Adjustment. Built-In 100-240V Wide Voltage Transformer. Intensity Adjustable By Digital Set And Reset.	●			
	Reflected/Transmitted Body, Low-Position Coaxial Coarse And Fine Adjustment, Coarse Adjustment Distance: 25mm; Fine Precision: 0.001Mm. With Coarse Adjustment Stop And Tightness Adjustment. Built-In 100-240V Wide Voltage Transformer, Double-Way Power Output. Intensity Adjustable By Digital Set And Reset; Switch For Reflection And Transmission, Built-In Transmitted Filters Lbd/Nd6/Nd25)		●		
Reflect Light	BF/DF Reflect Illumination, With Iris Field Diaphragm and Aperture Diaphragm, Both Central Adjustable, With Filter Slot and Polarizing Slot, With Bright Field/Dark Field Switch	●	●	A56.0915	
	12V100W Halogen Light Box, Pre Centered	●	●●	A56.0909-LH	
	12V100W Halogen Bulb (Philps 7724)	●	●●	A56.0923-12100	
	Interference Filter, For Reflect Light, Natural White	●	●	A5M.0953-LBD	
	Interference Filter, For Reflect Light, Blue, <480nm	○	○	A5M.0953-B	
	Interference Filter, For Reflect Light, Green, 520~570nm	○	○	A5M.0953-G	
Transmit Light	Interference Filter, For Reflect Light, Red, 630~750nm	○	○	A5M.0953-R	
	Transmit Illumination, 12V100W Halogen Light Box, Pre Centered		●	A56.0909-LH	
	12V100W Halogen Bulb (Philps 7724)	●	●●	A56.0923-12100	
Polarizing For Reflect Light	Swing-out Type Achromatic Condenser (NA 0.9)		●	A56.0934-R	
	Fixed Polarizer Flashboard	●	●	A5P.0924-RP	
	360° Rotatable Analyzer Flashboard	●	●	A5P.0924-RA360	
Power	Fixed Analyzer Flashboard	○	○	A5P.0924-RA	
	90-240V Wide Voltage, One Way Power Output	●			
Other	90-240V Wide Voltage, Double Way Power Output		●		
	Allen Key M3	●	●		
	Allen Key M4	●	●		
	Specimen Presser	○	○	A5M.0920	

Remark: '●' Means Standard Outfit, '○' Means Optional

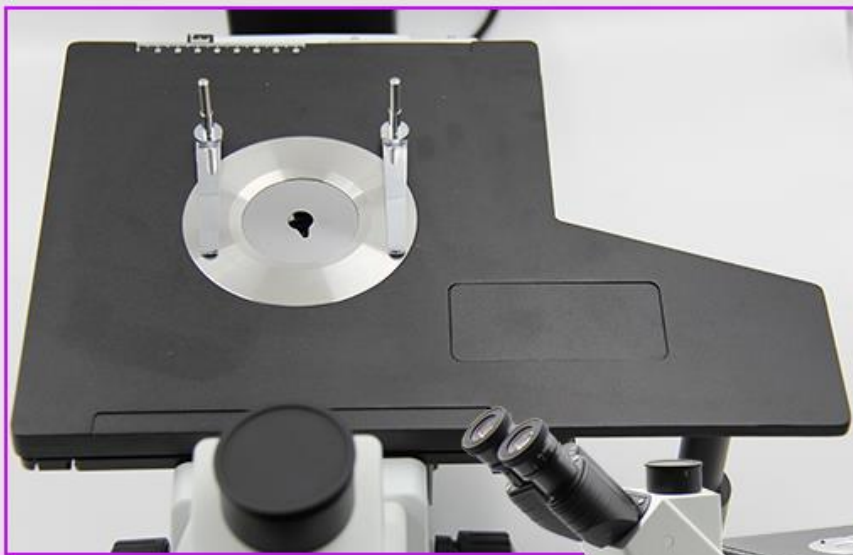
# A13.0912

## Inverted Metallurgical Microscope

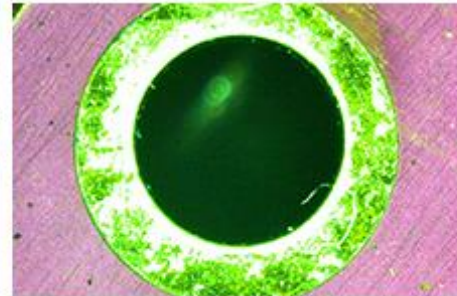
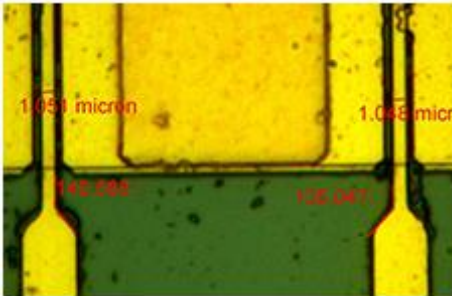
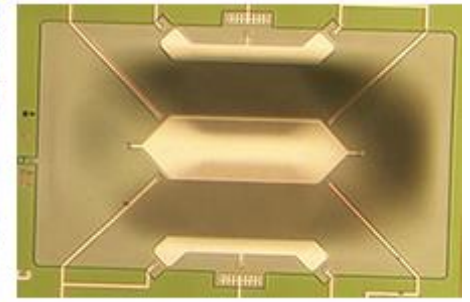
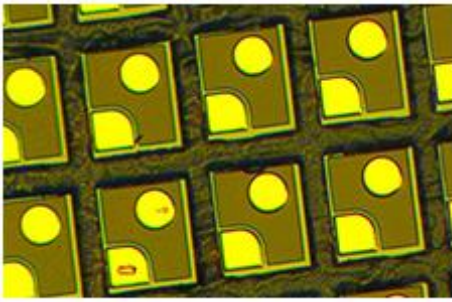
OPTO-EDU



Infinity Color Corrected Optical System  
One-piece Construction, With Filter Slot & Polarizing Slot  
Bright & Dark Filed, With BD Shifter  
BD Quintuple Nosepiece With DIC Slot  
Polarizer & 360° Analyzer



○ Right Hand Controls, Low Positioned, Three-Layer Mechanical stage, size 240x250mm, moving range 50x50mm, Bothway Linear Guide Rail



## Product Specification

### A13.0912-A Inverted Metallurgical Microscope

Optical	Infinity Color Corrected Optical System
Frame	One-piece Construction, With Filter Slot & Polarizing Slot
Head	Trinocular Head, Split Ratio 100:0 or 0:100, 45° Inclined, 360° Rotatable, IPD 50-75mm
Eyepiece	Plan WF10x/22mm, Diopter Adjustable, Reticle Attachable, High Eye-point
Field	Bright & Dark Filed, With BD Shifter
Objective	Infinity LWD BD Plan Achromatic Metallurgical Objective DIC-5x/0.15 WD11mm
	Infinity LWD BD Plan Achromatic Metallurgical Objective DIC-10x/0.3 WD9.5mm
	Infinity LWD BD Plan Achromatic Metallurgical Objective DIC-20x/0.45 WD3.4mm
	Infinity LWD BD Plan Achromatic Metallurgical Objective 50x/0.55 WD7.5mm
Focus	Coaxial Coarse & Fine Focusing System With Adjustable Tension, Coarse Range 9mm (6.5mm up & 2.5mm down), Fine Precision 2μm
Nosepiece	BD Quintuple Nosepiece With DIC Slot
Stage	Right Hand Controls, Low Positioned, Three-Layer Mechanical Stage, Size 240x250mm, Moving Range 50x50mm, Bothway Linear Guide Rail
	Metal Specimen Holder (Dia. 25)
Light Source	Reflected Halogen Lamp, 12V100W
	Light Indicator
	Brightness Adjustable
	ECO Infrared Induction System (Auto on/off)
	External Wide Voltage Transformer, 100V-240V Input, 12V13.4A Output
Polarization	Polarizer & 360° Analyzer

### Optional Accessories

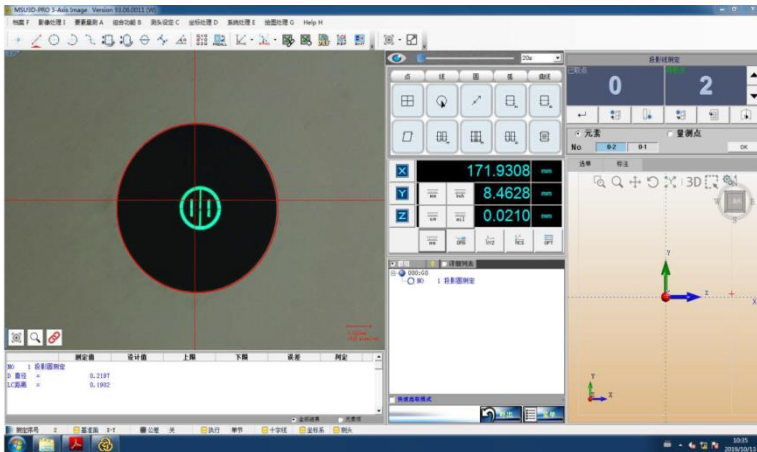
Eyepiece	Plan WF15X/16mm, Diopter Adjustable, High Eye-point	A51.0904-1516T
Objective	Infinity LWD BD Plan Achromatic Metallurgical Objective	A5M.0943-100
Adapter	0.35x C-Mount	A55.0934-35
	0.5x C-Mount	A55.0934-05
	0.65x C-Mount	A55.0934-65
	1x C-Mount	A55.0934-1
DIC	DIC Slider	A5M.0952-2



# A13.0921

## Precision Measuring Metallurgical Microscope, BD, DIC

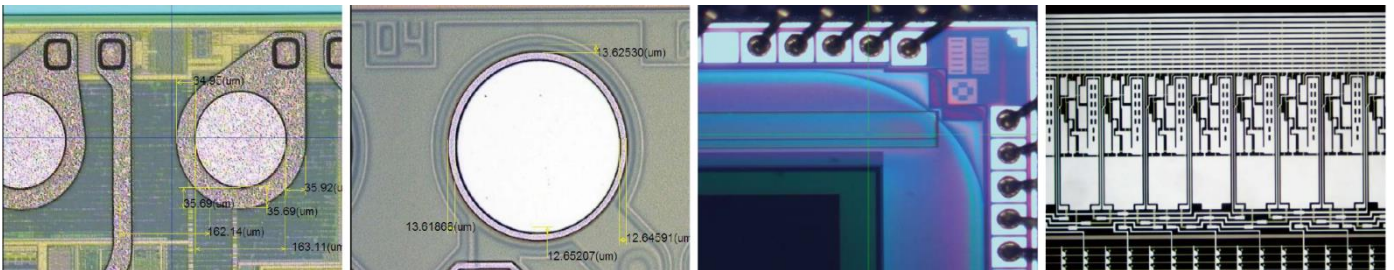
**OPTO-EDU**



Precise 3D Measuring 0.1um For X/Y/Z Axes With Motorized Optical Grating Ruler  
Reversed Quintuple Nosepiece, With DIC Slot, For Bright & Dark Field  
Long Working Distance Infinity Plan Achromatic BD Metallurgical Objective  
Large Size Manual Stage, With Digital Indicator. Z Axis With Auto-control Box For Focusing  
Include Simple & Powerful Measure Software Used In Computer

### Wide Field Usage

Dimension Measurement of IC Advanced Packaging Bumping Alignment Accuracy Measurement of IC  
Advanced Packaging Bumping Measurement of PCB Solder Pin Measurement of LCD Panel TFT



### Precision Measuring Tool

A13.0921 Measuring Microscope use 3D X/Y/Z measuring system with 0.1um reading, the high precision grating ruler integrated in the rack is imported from Japan. The z-axis is controlled by a high-precision electric controller, with 3 speeds available, focusing maneuverability, improve efficiency, reduce cost, and low fatigue.

# Product Specification

A13.0921 Precision Measuring Metallurgical Microscope, BD, DIC		-21	-32	-33
Magnification	Optical Magnification 50x~1000x, Total Magnification 135x~2700x			
Eyepiece	High Eyepoint Plan Eyepiece PL10x/22mm, Diopter Adjustable			
Head	5°~35° Infinity Gemel Trinocular Head, Erect Image, 360° Rotating, Interpupillary Range 50~76mm; Light Splitting Ratio Switch E0:P100/E100:P0			
Objective	<b>Long Working Distance Infinity Plan Achromatic Metallurgical Objective</b>			
	5x-DIC LMPL5x/0.15 W.D.10.8mm			
	10x-DIC LMPL10x/0.3 W.D.12.20mm			
	20x-DIC LMPLanFL20x/0.4 W.D.8.8mm, Semi-APO			
	50x LMPLFL50x/0.55 W.D.7.9mm			
	100x LMPLFL100x/0.80 W.D.2.1mm	○	○	○
	<b>Long Working Distance Infinity Plan Achromatic BD Metallurgical Objective</b>			
	5x-DIC/0.15 W.D.9.0mm	○	○	○
	10x-DIC/0.3 W.D.9.0mm	○	○	○
	20x-DIC/0.4 W.D.8.5mm, Semi-APO	○	○	○
	50x/0.55 W.D.7.5mm	○	○	○
100x/0.80 W.D.2.1mm	○	○	○	
DIC	DIC Prism (Reflection)	○	○	○
Nosepiece	Reversed Quintuple Nosepiece, With DIC Slot, For <b>Bright</b> Field			
	Reversed Quintuple Nosepiece, With DIC Slot, For <b>Bright &amp; Dark</b> Field	○	○	○
Working Stage & Illumination	Manual Stage, <b>Moving Range 200mm(X) x 100mm(Y)</b> , With Digital Indicator. Z Axis With Auto-control Box For Focusing; Z Axia Move Range 175mm. Measuring Precision: X/Y (3+L/200)um, Z Axis Repeatability Precision 2μm (20x Objective), With 5W LED Transmitted Illumination	●		
	Manual Stage, <b>Moving Range 300mm(X) x 200mm(Y)</b> , With Digital Indicator. Z Axis With Auto-control Box For Focusing; Z Axia Move Range 175mm. Measuring Precision: X/Y (3+L/200)um, Z Axis Repeatability Precision 2μm (20x Objective), With 5W LED Transmitted Illumination		●	
	Manual Stage, <b>Moving Range 300mm(X) x 300mm(Y)</b> , With Digital Indicator. Z Axis With Auto-control Box For Focusing; Z Axia Move Range 175mm. Measuring Precision: X/Y (3+L/200)um, Z Axis Repeatability Precision 2μm (20x Objective), With 5W LED Transmitted Illumination			●
Table	Table For Machine			
Illumination	Reflect Bright & Dark Field Illumination, With BD Switch Device; With Filter Slots For Filters And Polarizing Kit; 5W LED, Intensity Adjustable;			
Focusing	Focus Assist Controlled By High-Precision Electric Controller, With 3 Speeds Available, With Double Reticle; Focusing Range >400mm			
Polarizing	Polarizer Slide For Reflect Illumination			
	360° Rotatry Analyser Slide For Reflect Illumination			
Adapter	0.5x C-Mount, Focus Adjustable			
	0.65x C-Mount, Focus Adjustable	○	○	○
Digital Camera	1.2M Digital Camera, Pixel 1280(H) x 960(V); 60fps; Interface Gige; Sensor CMOS (Color)			
Software	MSU3D-Pro Measurment software			
Computer	DELL 3470, Intel i5 Commercial Office, Desktop Computer (i5-9400 8G 1T WIFI) 21.5" Monitor			
Spanner	Spanner M5			
	Spanner M4			
Packing	Foam+ Master Carton			
Micrometer	High Quality Micrometer Slide 0.01mm	○	○	○

# A13.1005

## Metallurgical Microscope, Bright Field/Dark Field

**OPTO-EDU**



Siedentopf Trinocular Viewing Head, Inclined At 30° Interpupillary 48-75mm  
 Coaxial Coarse And Fine Adjustment, Fine Division 1μm, Moving Range 32mm  
 Size Of The Soleplate 396X276X22mm, The Height Of Post 300mm, The Diameter Of Post 30mm  
 DIC 20X/100X; EW10X/22 Φ30

A13.1005 Metallurgical Microscope		A13.1005-B	A13.1005-BD	Cata. No.
Optical System	Infinite Optical System	●	●	
Eyepiece	EW10X/22 Φ30	●	●	A51.1003-1022
Infinite Plan Achromatic Objective	5X/0.12/∞/-(BF) LWD 15.5mm	●		A5M.1035-5
	10X/0.25/∞/-(BF) LWD 10mm	●		A5M.1035-10
	20X/0.4/∞/0(BF) LWD 5.8mm	●		A5M.1035-20
	50X/0.75/∞/0(BF) LWD 0.32mm	●		A5M.1035-50
	100X/0.8/∞/0(BF) LWD 2mm	●		A5M.1035-100
Infinite Plan Achromatic Objective	5X/0.12/∞/-(BF/DF) LWD 15.5mm		●	A5M.1036-5
	10X/0.25/∞/-(BF/DF) LWD 10mm		●	A5M.1036-10
	20X/0.4/∞/0(BF/DF) LWD 5.8mm		●	A5M.1036-20
	50X/0.75/∞/0(BF/DF) LWD 0.32mm		●	A5M.1036-50
	100X/0.8/∞/0(BF/DF) LWD 2mm		●	A5M.1036-100
DIC	20X/100X	○	○	A5M.1040
Head	Siedentopf Trinocular Viewing Head, Inclined 30° Interpupillary 48-75mm	●	●	
Incident Light	24V/100W Halogen Light, Lightness Adjustable	●	●	
	150W Cold Light, Lightness Adjustable	○	○	
	40WLED Cold Light, Lightness Adjustable	○	○	
	Polarizer And Analyzer	○	○	A5P.1002
	Blue, Green, Yellow and Ground Glass	●	●	
Focusing	Coaxial Coarse And Fine Adjustment, Fine Division 1μm, Moving Range 32mm	●	●	
Nosepiece	Backward Qunituple Nosepiece	●	●	
Stand	Size Of The Soleplate 396X276X22mm, The Height Of Post 300mm, The Diameter Of Post 30mm	●	●	
Photo Attachment	For SLR Camera, Specify NiKon/Canon When Order	○	○	A55.1001
Video Attachment	C Mount 1X	○	○	A55.1002-10

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable



# Product Details

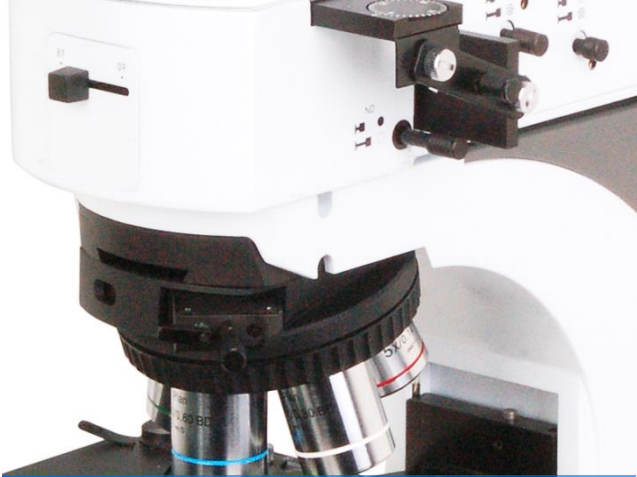
A13.1005 Metallurgical Microscope		A13.1005-B	A13.1005-BD	Cata. No.
Optical System	Infinite Optical System	●	●	
Eyepiece	EW10X/22 Φ30	●	●	A51.1003-1022
Infinite Plan Achromatic Objective	5X/0.12/∞/-(BF) LWD 15.5mm	●		A5M.1035-5
	10X/0.25/∞/-( BF) LWD 10mm	●		A5M.1035-10
	20X/0.4/∞/0(BF) LWD 5.8mm	●		A5M.1035-20
	50X/0.75/∞/0(BF) LWD 0.32mm	●		A5M.1035-50
	100X/0.8/∞/0(BF) LWD 2mm	●		A5M.1035-100
Infinite Plan Achromatic Objective	5X/0.12/∞/-(BF/DF) LWD 15.5mm		●	A5M.1036-5
	10X/0.25/∞/-( BF/DF) LWD 10mm		●	A5M.1036-10
	20X/0.4/∞/0(BF/DF) LWD 5.8mm		●	A5M.1036-20
	50X/0.75/∞/0(BF/DF) LWD 0.32mm		●	A5M.1036-50
	100X/0.8/∞/0(BF/DF) LWD 2mm		●	A5M.1036-100
DIC	20X/100X	○	○	A5M.1040
Head	Siedentopf Trinocular Viewing Head, Inclined 30° Interpupillary 48-75mm	●	●	
Incident Light	24V/100W Halogen Light, Lightness Adjustable	●	●	
	150W Cold Light, Lightness Adjustable	○	○	
	40WLED Cold Light, Lightness Adjustable	○	○	
	Polarizer And Analyzer	○	○	A5P.1002
	Blue, Green, Yellow and Ground Glass	●	●	
Focusing	Coaxial Coarse And Fine Adjustment, Fine Division 1μm, Moving Range 32mm	●	●	
Nosepiece	Backward Qunituple Nosepiece	●	●	
Stand	Size Of The Soleplate 396X276X22mm, The Height Of Post 300mm, The Diameter Of Post 30mm	●	●	
Photo Attachment	For SLR Camera, Specify NiKon/Canon When Order	○	○	A55.1001
Video Attachment	C Mount 1X	○	○	A55.1002-10

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

# A13.1013

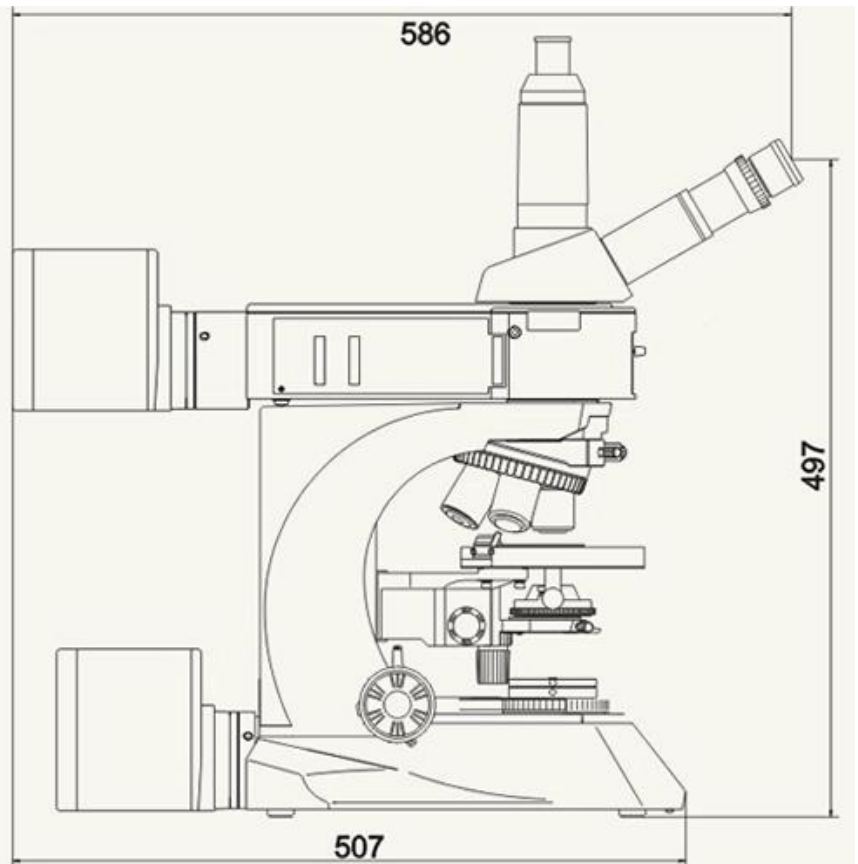
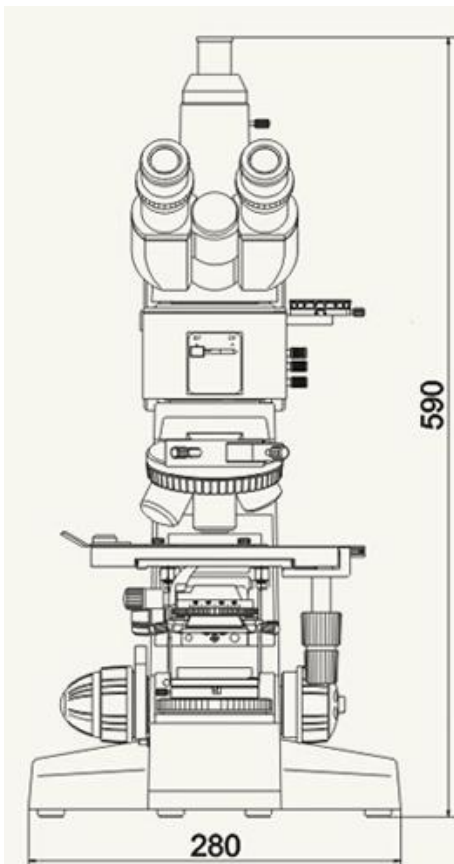
Metallurgical Microscope, BF/DF, PL, DIC

**OPTO-EDU**



**Bright Field / Dark Field Switch Knob**

Infinity Optical System, Bright Field/Dark Field, DIC, Polarizing  
Total Magnification 50x-1000x With Infinity Plan BF/DF Objectives  
Double Layer Mechanical Stage 186\*138mm, Moving Range 74\*50mm  
Maximum Sample Height 30mm/50mm, With Specimen Preparation Plate  
Reflect, Transmit/Reflect 24V 100W Halogen Light Kohler Illumination



# Product Specification

Items	A13.1013 BF/DF DIC Metallurgical Microscope	A	B
Optical System	Infinity Optical System, Bright Field/Dark Field, DIC, Polarizing		
Head	Seidentopf Trinocular Head Inclined at 30°, Interpupillary 48-75mm		
Eyepiece	Extra Wide Field Eyepiece EW10x/22mm, Eyepiece Tube Dia.30mm		
Nosepiece	Backward Quintuple Nosepiece		
Objective	Infinity Plan Achromatic Objectives 5x/ 0.12/ ∞/ - (BF/DF),W.D.12mm		
	Infinity Plan Achromatic Objectives 10x/ 0.25/ ∞/ - (BF/DF),W.D.10mm		
	Infinity Plan Achromatic Objectives 20x/ 0.4/ ∞/0 (BF/DF),W.D.4.3mm		
	Infinity Plan Achromatic Objectives 50x/ 0.75/ ∞/0 (BF/DF),W.D.0.32mm		
	Infinity Plan Achromatic Objectives 100x/0.80/∞/0 (BF/DF),W.D.2mm		
			o
			o
Focusing	Coaxial Coarse & Fine Adjustment, Fine Focusing Precision <1um, With Safty Stop, With Tension Adjustment		
Working Stage	Maximum Sample Height 30mm Double Layer Mechanical Stage 186*138mm, Moving Range 74*50mm, Including: --Specimen Preparation Plate --Slide Glass		o
	Maximum Sample Height 50mm Non-Porous Double Layer Mechanical Stage 186*138mm, Moving Range 74*50mm		o
Reflect Illumination	24V 100W Halogen Light, Brightness Adjustable Kohler Illumination With Aspherical Condenser Polarizer & Analyzer, Intergrate Board For Polarizer & Analyzer Blue, Green, Yellow Filter, Gound Glass		
Transmit Illumination	Swing-Out Condenser N.A.0.9/0.25 24V 100W Halogen Light With Aspherical Condenser Blue Filter		o

# Optional Accessories

A13.1013 BF/DF DIC Metallurgical Microscope Optional Accessories		
Objective	Infinity Plan Achromatic Objectives 40x/0.6/∞/0 (BF/DF),W.D.2.9mm	A5M.1036-40
DIC	20x, 100x DIC Slide	A5M.1040
Polarizing	Polarizer & Analyzer, Intergrate Board For Polarizer & Analyzer   For Reflect Illumination	A5P.1002
Filter	Netural Filter ND25	A5F.1011-25
	Netural Filter ND6	A5F.1011-6
Adaptor	Photo Adapter, For Nikon or Canon SLR Camera	A55.1001
	C-Mount 1.0x	A55.1002-10
	C-Mount 0.5x	A55.1002-05
Other	Specimen Presser	A5M.1010



# A13.1017

## Metallurgical Microscope, Reflect Light

**OPTO-EDU**



Upright Reflect Metallurgical Microscope  
 Total Magnification 40x-400x With LWD Infinity Objective  
 Non-Porous Mechanical Stage 150×140mm/75×50mm  
 Reflect Light 6V/20W Halogen Kohler Illumination  
 Related Model Transmit/Reflect Version A13.1018

### Product Specification

Specification A13.1017		A	B
Head	Binocular Head	•	
	Trinocular Head		•
Eyepiece	WF10x/18		
Nosepiece	Quadruple Nosepiece		
Objective	Infinity Plan Achromatic Objectives 4×/0.1/∞/- WD17.3mm		
	Infinity Plan Achromatic Objectives 10×/0.25/∞/- WD10.0mm		
	Infinity Plan Achromatic Objectives 40×/0.60/∞/0 WD2.9mm		
Focusing	Coaxial Fine & Coarse Adjustment		
Stage	Double Layer Mechanical Stage 150×140mm/75×50mm		
Filter	Blue		
	Green		
	Yellow		
	Ground Glass		
Illumination	Kohler Illumination, Epi-illuminator with iris aperture diaphragm and iris field diaphragm, 6V/20W Halogen Lamp, Brightness Adjustable		
Optional Accessories		Item No.	
Eyepiece	WF8x/18	A51.1002-8	
	WF12.5x/15	A51.1002-12.5	
	WF10x/18 With 0.1mm Micrometer & Cross Hair	A51.1007-10M	
Objective	Infinity Plan Achromatic Objectives 20x/0.40/∞/- WD5.8mm	A5M.1035-20	
	Infinity Plan Achromatic Objectives 40x/0.65/∞/- WD0.78mm	A5M.1035-40	
	Infinity Plan Achromatic Objectives 50x/0.75/∞/- WD0.32mm	A5M.1035-50	
	Infinity Plan Achromatic Objectives 80x/0.90/∞/- WD0.2mm	A5M.1035-80	
	Infinity Plan Achromatic Objectives 100x/0.90/∞/0 WD0.7mm	A5M.1035-100	
Polarizing	Simple Polarization Set	A5P.1004	
Other	Specimen Presser For Metallurgical Specimen Preparation	A5M.1010	

# A13.1018

## Metallurgical Microscope, Transmit & Reflect Light

**OPTO-EDU**



Upright Transmit/Reflect Metallurgical Microscope  
 Total Magnification 40x-400x With LWD Infinity Objective  
 Mechanical Stage 150x140mm/75x50mm  
 Transmit & Reflect Light 6V/20W Halogen Kohler Illumination  
 Related Model Reflect Version A13.1017

### Product Specification

Specification A13.1018		A	B
Head	Binocular Head	•	
	Trinocular Head		•
Eyepiece	WF10x/18		
Nosepiece	Quadruple Nosepiece		
Objective	Infinity Plan Achromatic Objectives 4x/0.1/∞/- WD17.3mm		
	Infinity Plan Achromatic Objectives 10x/0.25/∞/- WD10.0mm		
	Infinity Plan Achromatic Objectives 40x/0.60/∞/0 WD2.9mm		
Focusing	Coaxial Fine & Coarse Adjustment		
Stage	Double Layer Mechanical Stage 150x140mm/75x50mm		
Filter	Blue		
	Green		
	Yellow		
	Ground Glass		
Illumination	Kohler Illumination, Epi-illuminator with iris aperture diaphragm and iris field diaphragm, 6V/20W Halogen Lamp, Brightness Adjustable		
Optional Accessories		Item No.	
Eyepiece	WF8x/18	A51.1002-8	
	WF12.5x/15	A51.1002-12.5	
	WF10x/18 With 0.1mm Micrometer & Cross Hair	A51.1007-10M	
Objective	Infinity Plan Achromatic Objectives 20x/0.40/∞/- WD5.8mm	A5M.1035-20	
	Infinity Plan Achromatic Objectives 40x/0.65/∞/- WD0.78mm	A5M.1035-40	
	Infinity Plan Achromatic Objectives 50x/0.75/∞/- WD0.32mm	A5M.1035-50	
	Infinity Plan Achromatic Objectives 80x/0.90/∞/- WD0.2mm	A5M.1035-80	
	Infinity Plan Achromatic Objectives 100x/0.90/∞/0 WD0.7mm	A5M.1035-100	
Polarizing	Simple Polarization Set	A5P.1004	
Other	Specimen Presser For Metallurgical Specimen Preparation	A5M.1010	

# A13.2501

## Portable Metallurgical Microscope

**OPTO-EDU**

Portable Cordless Metallurgical Microscope 100x-400x  
 Long Working Distance Plan Objective 10x, 40x Standard  
 LWD Plan Objective (No Cover Glass) 20x, 50x, 60x, 80x, 100x Optional  
 Magnet Stand, X/Y Moving Range 10x10mm Optional  
 Upgradeable To Digital Microscope A32.2501



### Product Specification

Magnet Stand Optional

A13.2501-B Portable Metallurgical Microscope		
Total Magnification	100-400x	
Mechanical Tube Length	160mm	
Head	Monocular Vertical Head	
Eyepiece	WF10X	
LWD Plan Objective (No Cover Glass)	PLL 10X/0.25 W.D. 7.3mm PLL 40X/0.65 W.D. 0.5mm	
Focusing	Coaxial Coarse & Fine Focus Knob, Focusing Range 36mm	
Light Source	LED Coaxial Illumination, Brightness Adjustable, Powered By Rechargeable Batteries (Battery NOT Included For Air Shipment)	
Packing	Portable Aluminium Case	
A13.2501-B Portable Metallurgical Microscope Optional Accessories		
Adapter	Photo Adapter For SLR Digital Camera Canon Series	A55.2622-C
	Photo Adapter For SLR Digital Camera Nikon Series	A55.2622-N
Polarizing Set	Polarizer & Analysiser Slides	A5P.2601
LWD Plan Objective (No Cover Glass)	20x/0.40mm, WD8.6	A5M.0234-20
	50x/0.70mm, WD2.20, Spring	A5M.0234-50A
	60x/0.75mm, WD1.34, Spring	A5M.0234-60
	80x/0.80mm, WD0.96, Spring	A5M.0234-80A
	100x/1.25mm, WD0.33, Spring, Oil	A5M.0234-100
Magnet Stand	Magnet Stand, X/Y Moving Range 10x10mm	A54.2502



# A14.1501

## Student Mini Cordless Inverted Microscope

**OPTO-EDU**



Creative Economical Inverted Microscope Coming New In 2019!  
Kid-friendly Inverted Design To Watch Both Prepared Slide & Live Cell In Glass Bottle  
Long Working Distance Objectives 4x10x20x Supply Magnification 40x~320x  
Complete Accessories Incl. Mobile Phone Holder & All Experiment Tools  
Cordless Power Free For Kids Use Outdoors In Any Place

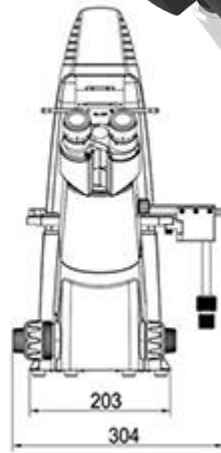
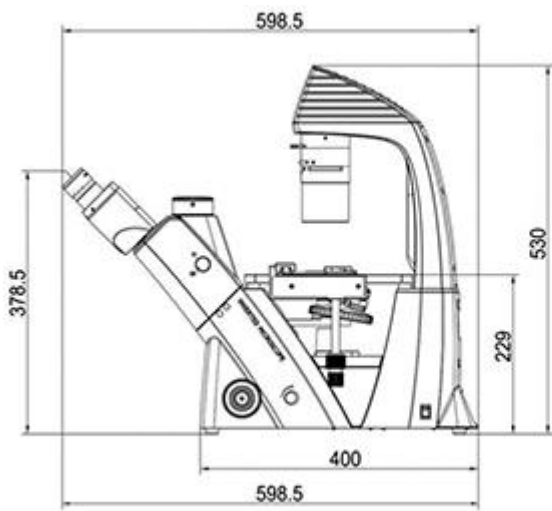
### A14.1501 Student Mini Cordless Inverted Microscope Specification

Magnification	40x~320x
Optical System	Invered Achromatic, Long Working Distance
Head	Monocular Head Inclined 45°
Eyepiece Tube	Inner Dia. 23.2mm
Eyepieces	WF10x/14mm, WF16x/9mm
Nosepiece	Triple
Objective	4x, 10x, 20x
Focusing	Coarse Focus Knob
Working Stage	Single Layer Round Stage Dia.118mm, With Clip
Condenser	Long Working Distance Abbe Condenser, N.A. 0.19, With Filter Slot
Light Source	Transmit Light 0.5W LED, Brightness Adjustable
Power	Cordless Powered By 3xAA 1.5V Batteries (Battery NOT Included For Air Shipment)
Learning Accessory Kit	Universal Mobile Phone Holder
	Prepared Slides *5
	Blank Slides*7
	Slide Cover *7
	Slide Sticker *7
	PlasticTweezers
	Plastic Petri Dish
	PlasticSpatula
Plastic Sample Bottle *2	

# A14.2603

## Inverted Microscope, Transmit Light

**OPTO-EDU**



Seidentopf Trinocular Head, Light Split Switch E100:P0 / E20:P80  
 LWD Infinity Plan Fluorescent Objectives Bright Field & Phase Contrast Observation Supported  
 LWD Condenser N.A.0.3 Working Distance 72mm, Up To 195mm Without Condenser  
 Standard Halogen 6V30W Koehler Illumination, 5W LED Optional For Choice  
 Fluorescence Attachment Can Be Added To Upgrade It As A16.2614 Fluorescent Microscope



Dia. 30mm, Diopter Adjustable  
 Adapt To Different Eyes  
 Larger Field Of View



Long Working Distance  
 Infinity Objective  
 Observable Petri Dish



Coarse & Fine Focusing  
 Elasticity Adjustable  
 Adapt To Different Operators



Brightness Adjustable  
 Adapt To Different Samples  
 Make The Effect More Perfect



Different Culture Dish Holder  
 Can Observe  
 Different Samples



Filter Make The Effects  
 Of Different Observed  
 Samples More Realistic

Items	A14.2603 Inverted Biological Microscope Specification	A14.2603	A14.2603-TR	Cata. No.
Head	Seidentopf Trinocular Head Inclined 45°, Interpupillary Distance 48~76mm, Light Split Switch E100:P0 / E20:P80	●	●	A53.2643
Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint,, Diopter Adjustable	●●	●●	A51.2621-1022
	WF15X/16mm, Dia.30mm, High Eyepoint, Diopter Adjustable	○○	○○	A51.2621-1516
	WF20X/12mm, Dia.30mm, High Eyepoint, Diopter Adjustable	○○	○○	A51.2621-2012
Nosepiece	Quintuple	●	●	A54.2610-N925
LWD Infinity Plan Fluorescent Objectives Newly Update 2021	L Plan FL 4x/0.11 W.D.=12.1mm	○	○	A5F.2635-4
	L Plan FL 10x/0.25 W.D.=10.3mm	●	●	A5F.2635-10
	L Plan FL 20x/0.45 W.D.=5.8mm	●	●	A5F.2635-20
	L Plan FL 40x/0.65 W.D.=5.1mm	●	●	A5F.2635-40
LWD Infinity Plan Phase Contrast Fluorescent Objectives Newly Update 2021	L Plan FL PHP 4x/0.10 W.D.=9.2mm	○	○	A5C.2635-4
	L Plan FL PHP 10x/0.25 W.D.=10.3mm	○	○	A5C.2635-10
	L Plan FL PHP 20x/0.45 W.D.=5.8mm	●	●	A5C.2635-20
	L Plan FL PHP 40x/0.65 W.D.=5.1mm	○	○	A5C.2635-40
Phase Contrast	Centering Telescope 11x	○	○	A5C.2610
	Annular Spot 4x	○	○	A5C.2611-4
	Annular Spot 20x/ 40x	●	●	A5C.2611-10
	Annular Spot 10x	●	●	A5C.2611-20/40
Working Stage	Mechanical Stage Size 210x241mm, Round Slide Size Φ110mm	●	●	A54.2601-D4
	Attachable Mechanical Stage For 96 Holes Plate Moving Range 128x80mm	○	○	A54.2605
	Culture Dish Holder 65mm	○	○	A54.2606-65
	Culture Dish Holder 54mm	●	●	A54.2606-54
	Culture Dish Holder 35mm	○	○	A54.2606-35
	Holder For Blood Cell Counter	○	○	A54.2606-BC
	Universal Holder (New Accessory 2021)	○	○	A54.2606-UH
Round Glass Holder (New Accessory 2021)	○	○	A54.2606-GL	
Condenser	Long Working Distance, Quickly Detachable, N.A.0.3, Working Distance 72mm (With Condenser), 195mm (Without Condenser).	●	●	A56.2614-D4
Tranmist Illumination	Koehler Illumination Halogen 6V/30W, Input Voltage 100V~240V	●	○	A56.2613-6V30W
	Koehler Illumination 5W LED, Input Voltage 100V~240V	○	●	A56.2651-5W
Reflect Illumination	Koehler Illumination 5W LED, Input Voltage 100V~240V Polarizing Set	-	●	
Power	ECO, Auto Power Off System. Power Off Automatically Upon User Leaving 10 Minutes, Power On Automatically Upon User Approaching Detected, This Function Can Be Shut Down Manually	○	○	A56.2660
Filter	Blue, Dia.34mm	●	●	A56.2616-34B
	Green, Dia.34mm	●	●	A56.2616-34G
	Amber, Dia.34mm	○	○	A56.2616-34A
	Grey, Dia.34mm	○	○	A56.2616-34N
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	A55.2601-75
	C-Mount1.0x, Focus Adjustable	○	○	A55.2601-10
Epi Fluorescence Illumination	Upgrade to A16.2614-2 Inverted Fluorescence Microscope With: B,G China Fluorescent Filter 3 Holes Fluorescent Slide Unit, With Field Diaphragm, Center Adjustable 100W Mercury Lamp House 100W Mercury Power Box, Digital Disp. Ultraviolet Protection Barrier	○	○	A5F.2603-2
	Upgrade to A16.2614-4 Inverted Fluorescence Microscope With: B,G,U,UV China Fluorescent Filter 3 Holes Fluorescent Slide Unit, With Field Diaphragm, Center Adjustable 100W Mercury Lamp House 100W Mercury Power Box, Digital Disp. Ultraviolet Protection Barrier	○	○	A5F.2603-4
	Upgrade to A16.2614-L2 Inverted Fluorescence Microscope With: B,G China Fluorescent Filter 3 Holes Fluorescent Slide Unit, With Field Diaphragm, Center Adjustable 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier	○	○	A5F.2604-2



# A14.2605

## Inverted Biological Phase Contrast Microscope

**OPTO-EDU**



12V/50W Kohler Illumination Makes The Field More Even And Brighter



Dual Photo & Video Channel Support Eyepiece / Digital Camera / SLR Camera View At Same Time  
 ECO Automatic Power Off Upon User Leaving 10 Minutes & Power On Upon User Back  
 LWD Infinity Plan Objectives Bright Field & Phase Contrast Observation Supported  
 4 Holes Disc Phase Contrast Condenser + Halogen 12V50W Koehler Illumination  
 Fluorescence Attachment Can Be Added Upgrade To A16.2614 Fluorescent Microscope

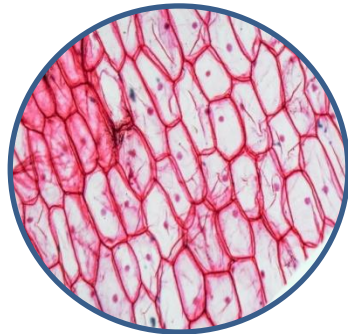
Items	A14.2605 Inverted Biological Microscope Specification	A14.2605	Cata. No.
A14.2605 Upgraded From A14.2604	--Dual Photo & Video Channel System --ECO Automatic Power Off System --4 Holes Disc Phase Contrast Condenser --Halogen 12V50W Koehler Illumination		
Head	Seidentopf Trinocular Head Inclined 45°, Interpupillary Distance 48~76mm, Light Split Switch E100:P0 / E20:P80  Dual Photo & Video Channel Support Eyepiece View / Digital Camera/SLR Camera Take Picture & Record Video At Same Time: --Eyepiece View Has 100% Or 20% Light Switchable --Digital Camera Port Has 0% Or 80% Light Switchable --Photography Port 100% Light For SLR Camera (Standard Outfit Including SLR Camera Adapter 1pc)	●	A53.2643
Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint,, Diopter Adjustable	●●	A51.2621-1022
	WF15X/16mm, Dia.30mm, High Eyepoint, Diopter Adjustable	○○	A51.2621-1516
	WF20X/12mm, Dia.30mm, High Eyepoint, Diopter Adjustable	○○	A51.2621-2012

Nosepiece	Quintuple	●	A54.2610-N925
LWD Infinity Plan Fluorescent Objectives Newly Update 2021	L Plan FL 4x/0.11 W.D.=12.1mm	●	A5F.2635-4
	L Plan FL 10x/0.25 W.D.=10.3mm	○	A5F.2635-10
	L Plan FL 20x/0.45 W.D.=5.8mm	○	A5F.2635-20
	L Plan FL 40x/0.65 W.D.=5.1mm	○	A5F.2635-40
LWD Infinity Plan Phase Contrast Fluorescent Objectives Newly Update 2021	L Plan FL PHP 4x/0.10 W.D.=9.2mm	○	A5C.2635-4
	L Plan FL PHP 10x/0.25 W.D.=10.3mm	●	A5C.2635-10
	L Plan FL PHP 20x/0.45 W.D.=5.8mm	●	A5C.2635-20
	L Plan FL PHP 40x/0.65 W.D.=5.1mm	●	A5C.2635-40
Phase Contrast	4 Holes Rotating Disc Phase Contrast Condenser N.A.0.4, W.D. 45mm, Up/Down Adjustable	●	A56.2612
	Centering Telescope 11x	●	A5C.2610
Working Stage	Mechanical Stage Size 210x241mm, Round Slide Size $\Phi$ 110mm	●	A54.2601-D4
	Attachable Mechanical Stage For 96 Holes Plate Moving Range 128x80mm	●	A54.2605
	Culture Dish Holder 65mm	○	A54.2606-65
	Culture Dish Holder 54mm	●	A54.2606-54
	Culture Dish Holder 35mm	○	A54.2606-35
	Holder For Blood Cell Counter	○	A54.2606-BC
	Universal Holder (New Accessory 2021)	○	A54.2606-UH
Illumination	Round Glass Holder (New Accessory 2021)	○	A54.2606-GL
	Koehler Illumination Halogen 12V/50W, Input Voltage 100V~240V	●	A56.2613-50W
Power	Koehler Illumination 5W LED, Input Voltage 100V~240V	○	A56.2651-5W
	ECO, Auto Power Off System. Power Off Automatically Upon User Leaving 10 Minutes, Power On Automatically Upon User Approaching Detected, This Function Can Be Shut Down Manually	●	A56.2660
Filter	Blue, Dia.34mm	●	A56.2616-34B
	Green, Dia.34mm	●	A56.2616-34G
	Amber, Dia.34mm	○	A56.2616-34A
	Grey, Dia.34mm	○	A56.2616-34N
Adapter	Photo Adapter With 1.7x Photo Eyepiece,100% Light For Camera Port, For Canon SLR Digital Camera	●	A55.2622-BC17
	Photo Adapter With 1.7x Photo Eyepiece,100% Light For Camera Port, For Nikon SLR Digital Camera	○	A55.2622-BN17
	Photo Adapter With 2.5x Photo Eyepiece,100% Light For Camera Port, For Canon SLR Digital Camera With 1" CCD Sensor	○	A55.2622-BC25
	Photo Adapter With 2.5x Photo Eyepiece,100% Light For Camera Port, For Nikon SLR Digital Camera With 1" CCD Sensor	○	A55.2622-BN25
	C-Mount 0.5x, Focus Adjustable	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	A55.2601-75
	C-Mount1.0x, Focus Adjustable	○	A55.2601-10
Fluorescence	Upgrade to A16.2615-L2 Inverted Fluorescence Microscope With: B,G China Fluorescent Filter 3 Holes Fluorescent Slide Unit, With Field Diaphragm, Center Adjustable 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier	○	A5F.2604-2
	Upgrade to A16.2615-L4 Inverted Fluorescence Microscope With: B,G,U,UV China Fluorescent Filter 3 Holes Fluorescent Slide Unit, With Field Diaphragm, Center Adjustable 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier	○	A5F.2604-4
Package	Packing Size: 660mmx590mmx325mm		
Weight	Gross Weight: 18 kgs, Net Weight: 13.5 kgs		
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories.			

# A14.0900

## Inverted Microscope, Kohler Illumination

OPTO-EDU



A14.0900 is Designed for cell culture observation, to get details of cell growing process, internal spontaneous, fluorescence phenomenon, living cell fluorescence transfection, protein transfer and etc. Color corrected infinity system (CSIS), excellent optical performance and great image. Application of high-contrast and low chromatic phase contrast observation, access to detailed examination of internal structure of the cells. Well designed body structure, steady and reliable and better aseismic performance.



### A14.0900 Inverted Microscope, Kohler Illumination

Built-in Kohler illuminator, The Condenser Bracket Can Be Rotated 30 Degree, Swivel Bracket With The Orientation and Locking Device, With Iris Diaphragm and The Center of Filament Can be Adjusted N.A.0.3 Working Distance 72mm, for 4x- 40x Objectives N.A.0.5 Working Distance 28mm, for Higher Magnification Objectives



# Product Specification

A14.0900 Inverted Microscope, Kohler Illumination		A	B
Optical System	Infinity Color Corrected Optical System		● ●
Head	Binocular Head		●
	Trinocular Head, Light Split Switch E100:P0/E80:P20		●
	Gemel Viewing Head, 45 Degree Inclined, Interpapillary Distance 54-75mm, One eyepiece tube with ±5 Diopter Adjustment,		● ●
Eyepiece	PL10x/22mm, High Eyepoint, Wide Field		● ●
	PL15x/16mm, High Eyepoint, Wide Field		○ ○
Nosepiece	Reversed Revolving Quintuple Nosepiece		● ●
Objective	Long Working Distance Infinity Plan Achromatic Objectives	LWDPL 4x/0.10, W.D.=22mm	● ●
		LWDPL 10x/0.25, W.D.=7.94mm	● ●
		LWDPL 20x/0.40, W.D.=7.66mm	○ ○
		LWDPL 40x/0.60, W.D.=3.72mm	● ●
	LWD Infinity Plan Phase Contrast Objectives	LWDPL 10x/0.25, W.D.=7.94mm	○ ○
		LWDPL 20x/0.40, W.D.=7.66mm	● ●
	LWDPL 40x/0.60, W.D.=3.71mm	○ ○	
Stage	Fixed Stage Size 250*160mm, Slider Clips		● ●
	Glass Plate		● ●
	Metal Plate		● ●
	Petri Dish Holder, Dia.35mm		● ●
	Movable Ruler, Travel Range 120x78mm		○ ○
	Extension Plate		○ ○
Focusing	Coaxial Coarse & Fine Focusing System, Working Distance Of Every Circle: 38mm/Coarse Focus, 0.2mm/ Fine Focus, Minimal Read 0.002mm/,With Tension Adjustment, With Safety Stop		● ●
Condenser	N.A.0.3 Kohler Illumination Condenser, with Phase Adjustable Slide Plate, Long Working Distance 72mm. The Whole Set Can Be Rotated Down		● ●
	N.A.0.5 condenser for option, dismountable		○ ○
Phase Contrast	Phase Contrast Plug-board for 10x-40x, Center Adjustable		● ●
	Centering Telescope Dia. 30mm		● ●
Filter	Dia.45mm Green Interference Filter		● ●
	Dia.45mm Color Temperature Change Filter		● ●
	Dia.45mm Infrared Eliminate Filter		○ ○
	Dia.45mm Rubidium Glass Filter		○ ○
Light	Kohler Illumination, With Iris Aperture and Field Diaphragm, 6V/30W Halogen Bulb, Center And Focus Adjustable, Brightness Adjustable		● ●
Photo Adapter	Photo Tube(with PK adaptor), 3.2x Lens		○ ○
Video Adapter	0.5x/0.67x C Mount Adaptor		○ ○
Power	Wide Voltage 90-240V		● ●

# A14.0901

## Inverted Microscope, Critical Illumination

OPTO-EDU



Color corrected infinity system (CSIS), excellent optical performance and great image. Application of high-contrast and low chromatic phase contrast observation, access to detailed examination of internal structure of the cells. Supply long working distance and high N.A. objectives to get the flat and clear image. Well designed body structure, steady and reliable and better aseismic performance. Critical Illumination, with long working distance condenser, has capacity to use revolution bottle and suit for many sample containers.



A14.0901-A



A14.0901-B

# Product Specification

A14.0901 Inverted Microscope			A	B
Optical System	Infinity Color Corrected Optical System		●	●
Head	Binocular Head		●	
	Trinocular Head, Light Split Switch E100:P0/E80:P20			●
	Gemel Viewing Head, 45 Degree Inclined, Interpapillary Distance 54-75mm, One eyepiece tube with ±5 Diopter Adjustment,		●	●
Eyepiece	PL10x/22mm, High Eyepoint, Wide Field		●	●
	PL15x/16mm, High Eyepoint, Wide Field		○	○
Nosepiece	Reversed Revolving Quintuple Nosepiece		●	●
Objective	Long Working Distance Infinity Plan Achromatic Objectives	LWDPL 4x/0.10, W.D.=22mm	●	●
		LWDPL 10x/0.25, W.D.=7.94mm	●	●
		LWDPL 20x/0.40, W.D.=7.66mm	○	○
		LWDPL 40x/0.60, W.D.=3.72mm	●	●
	LWD Infinity Plan Phase Contrast Objectives	LWDPL 10x/0.25, W.D.=7.94mm	○	○
		LWDPL 20x/0.40, W.D.=7.66mm	●	●
		LWDPL 40x/0.60, W.D.=3.71mm	○	○
Stage	Fixed Stage Size 250*160mm, Slider Clips		●	●
	Glass Plate		●	●
	Metal Plate		●	●
	Petri Dish Holder, Dia.35mm		●	●
	Movable Ruler, Travel Range 120x78mm		○	○
	Extension Plate		○	○
Focusing	Coaxial Coarse & Fine Focusing System, Working Distance Of Every Circle: 38mm/Coarse Focus, 0.2mm/ Fine Focus, Minimal Read 0.002mm/,With Tension Adjustment, With Safety Stop		●	●
Condenser	N.A.0.3 Kohler Illumination Condenser, with Phase Adjustable Slide Plate, Long Working Distance 72mm. The Whole Set Can Be Rotated Down		●	●
	N.A.0.5 condenser for option, dismountable		○	○
Phase Contrast	Phase Contrast Plug-board for 10x-40x, Center Adjustable		●	●
	Centering Telescope Dia. 30mm		●	●
Filter	Dia.45mm Green Interference Filter		●	●
	Dia.45mm Color Temperature Change Filter		●	●
	Dia.45mm Infrared Eliminate Filter		○	○
	Dia.45mm Rubidium Glass Filter		○	○
Light	Critical Illumination, With Iris Aperture, Halogen 6V30W, Pre-centered, Intensity Adjustable		●	●
Photo Adapter	Photo Tube(with PK adaptor), 3.2x Lens		○	○
Video Adapter	0.5x/0.67x C Mount Adaptor		○	○
Power	Wide Voltage 90-240V		●	●



# A14.0912

## Inverted Biological Microscope

**OPTO-EDU**



Infinity Color Corrected Optical System + Positive Phase Contrast  
 Plan WF10x/22mm, Diopter Adjustable, High Eye-point  
 Infinity LWD Plan Achromatic Objective 4x/10x/40x & Phase Contrast 20x  
 Phase Contrast Filter & Centering Telescope  
 5W LED With Light Indicator, With ECO Auto On/Off Function

### A14.0912 Inverted Microscope

Optical System	Infinity Color Corrected Optical System
Head	Trinocular Head, Split Ratio 50:50, 45° Inclined, 360° Rotatable, IPD 50-75mm,
Eyepiece	Plan WF10x/22mm, Diopter Adjustable, High Eye-point,
Objective	Infinity LWD Plan Achromatic Objective 4x/10x/40x Infinity LWD Positive Phase Contrast Objective 20x
Focus System	Coaxial Focus System With Tension Adjustment, Coarse Range: 9mm, Fine Precision 0.002mm
Nosepiece	Quadruple Nosepiece
Condenser	LWD N.A. 0.30, W.D. 72mm, Dismountable, Phase Contrast Slide
Stage	Right Hand Controls, Low Positioned, Fixed Mechanical Stage, Size 215x250mm, Dia.35 Petri Dish Holder, Metal Plate And Glass Plate
Light Source	5W LED, With Light Indicator, Brightness Adjustable
	ECO Infrared Induction System (Auto on/off)
	External Wide Voltage Transformer, 100V-240V Input, 12V5A Output,
Phase Contrast	Centering Telescope Dia.30mm
	IF550 Contrast Green Filter Dia.45mm
Filter	LBD Color Temperature Change Filter Dia.45mm

### Optional Accessories

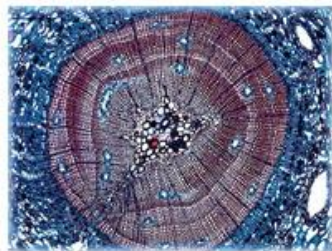
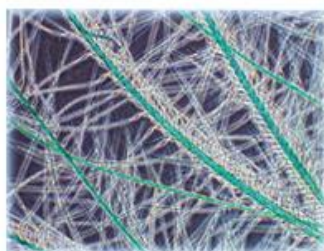
### Item No.

Eyepiece	Plan WF15x/16mm, Diopter Adjustable, High Eye-point	
Stage	Mechanical Mobile Ruler, Moving Range 120(X)*78(Y)mm Stage Extension Plate	A54.0945-03
Adapter	035x C-Mount	
	0.5x C-Mount	
	0.65x C-Mount	
	1.0x C-Mount	

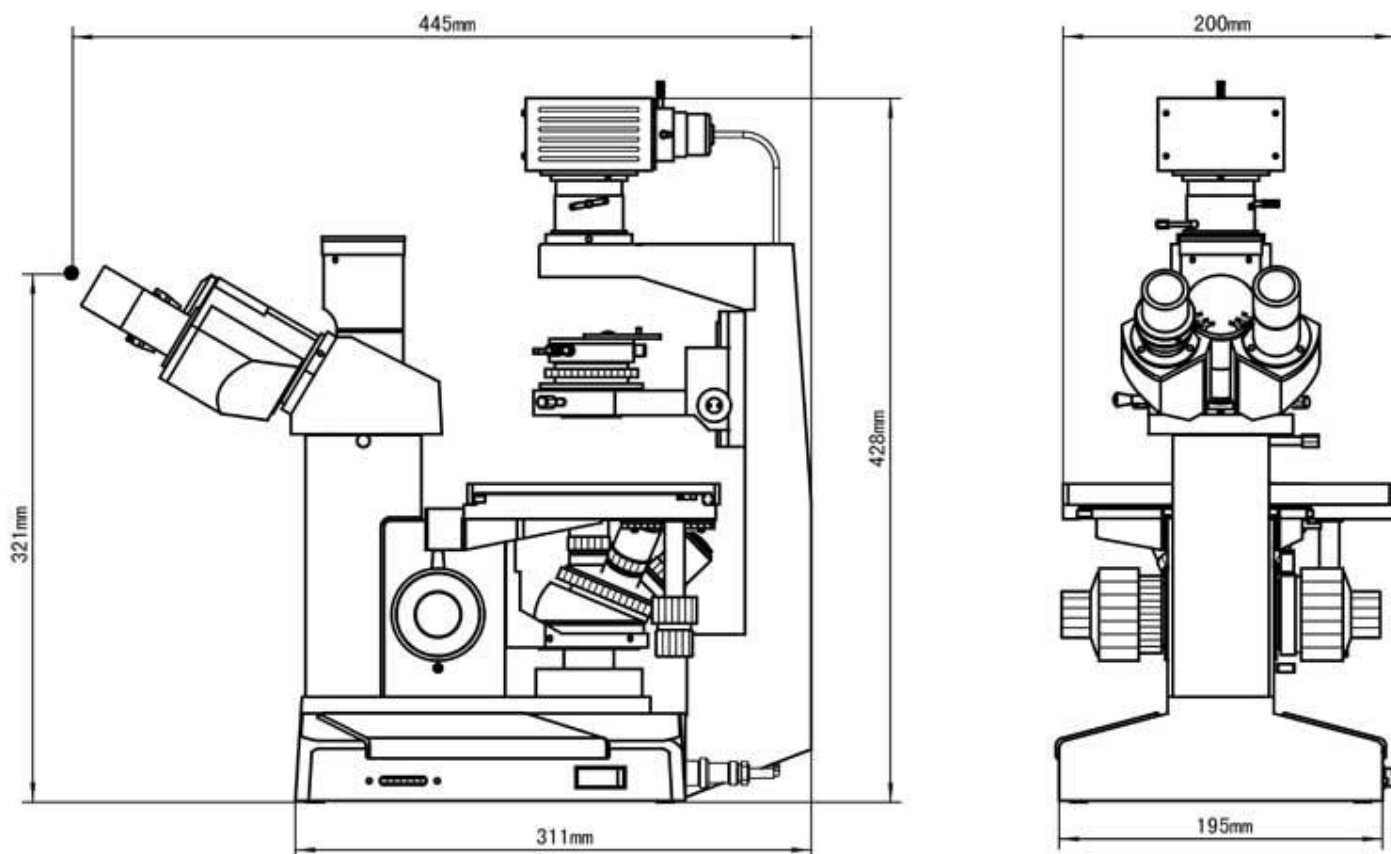
# A14.0201

## Inverted Biological Phase Contrast Microscope

OPTO-EDU



Total Magnification 100-400x Inverted Phase Contrast Microscope  
Wide Field Eyepiece WF10x/20mm, LWD Objective 10x,25x,40x  
Impellent Phase Contrast Slide And 10x Phase Contrast Objective Included  
Coaxial Coarse/Fine Focus System, Minimum Division 0.002mm  
Tranismit Light Halogen Lamp 6V 20W With Brightness Control



# Product Specification

## A14.0201 Inverted Phase Contrast Microscope

is equipped with wide field eyepieces, long working distance plan achromatic objectives, long working distance condenser and phase contrast unit. It can observe transparent and unfinished living specimen in culture bottle or culture utensil. It is the ideal tools for research of living specimen structure, liquid, deposits and so on.

- Wide Field Eyepiece WF10x/20mm, LWD Objective 10x,25x,40x
- Impellent Phase Contrast Slide And 10x Phase Contrast Objective Included,
- Sliding Phase Contrast Slide Unit Optional
- Coaxial Coarse/Fine Focus System, Minimum Division 0.002mm
- Tranismit Light Halogen Lamp 6V 20W With Brightness Control

### A14.0201 Inverted Phase Contrast Microscope

Magnification	Total 100~400x
Head	Trinocular Head, 30° Inclined, 100 Ligh Pass For Photography
Eyepiece	WF10x/20mm Wide Field
Nosepiece	Quadruple
Objective	LWD Plan Achromatic Objective
	PLL10x/0.25, W.D.8.8mm
	PLL 25x/0.40, W.D.4.8mm
	PLL 40x/0.60, W.D.3.3mm
	LWD Plan Phase Contrast Objective
	PLL10x/0.25 PHP, W.D.8.1mm
Working Stage	Double Layer Mechanical Stage 200*152mm, Moving Range 75*30mm
	Culture Dish Holder, For Dia.68mm Or 77*33mm Culture Utensil
	Culture Dish Holder, For Dia.68mm
Focusing	Coaxial Coarse & Fine Focus Knob, With Tension Adjustable And Limit Stopper, Minimum Division 0.002mm
Impellent Phase Contrast	Long Working Distance Phase Contrast Condener, N.A.0.4, Working Distance 30mm, Rack & Pinion Adjustable
	Impellent Style Phase Plate 10x
	Centering Telescope Eyepiece 10x
Filter	Blue, Green, Frost Filter
Light Source	Kohler Illumination, 6V20W Halogen Lamp, Brightness Adjustable

### A14.0201 Optional Accessories

Eyepiece	WF16x/11mm	A51.0203-16A	
	Dividing Eyepiece 10x/20mm, 0.1mm/Div	A51.0205-G10A	
Impellent Phase Contrast	LWD Plan Phase Contrast Objective	PLL 25x/0.40 PHP, W.D.4.78mm	A5C.0232-25
		PLL 40x/0.60 PHP, W.D.3.32mm	A5C.0232-40
	Ultra Long Working Distance Phase Contrast Condener, N.A.0.4, Working Distance 70mm	A5M.0210-6	
	Impellent Phase Contrast Plate 25x	A5C.0211-2	
	Impellent Phase Contrast Plate 40x	A5C.0211-3	
Sliding Phase Contrast	LWD Plan Phase Contrast Objective	PLL10x/0.25 PHP2, W.D.8.1mm	A5C.0232-10a
		PLL25x/0.40 PHP2, W.D.4.78mm	A5C.0232-25a
		PLL40x/0.60 PHP2, W.D.3.32mm	A5C.0232-40a
	Long Working Distance Phase Contrast Condener, N.A.0.4, Working Distance 55mm	A5M.0210-7	
	Sliding Phase Contrast Plate 10x	A5C.0211-4	
	Sliding Phase Contrast Plate 25x/40x	A5C.0211-5	
Filter	Yellow Filter	A56.0209-3	
Adapter	CCD Adapter 0.5x	A55.0202-04	
	Digital SLR Camera Adapter for Canon EF Series	A55.0204-02	



# A14.0205

## Inverted Biological Phase Contrast Microscope, DIC, PMC

**OPTO-EDU**



**Binocular Head With WF10x/22mm Eyepiece**

Inverted Biological Phase Contrast Microscope, Upgradeable To DIC, PMC  
WF10x/22 Eyepiece, Bright Field LWD Infinity Plan 10x20x40x,  
Large Working Stage 224x205mm, Moving Stage 112x77mm  
LWD Condenser W.D.70mm With Phase Contrast Slide  
LWD Infinity Plan Phase Contrast Objective, Hoffman Objective, DIC Objective



**Mechanical Stage Size 224x208mm, With Detachable Moving Stage**

# Product Specification

## A14.0205 Series Inverted Phase Contrast Microscope

A14.0205-PMC-DIC

A14.0205 Series Inverted Phase Contrast Microscope, is newly designed multi-functional microscope which combined Positive Phase Contrast, Polarizing Modulation Contract (PMC) (Upgrade from Hoffman Modulation Contract HMC), Differential Interference Contrast (DIC), and adopts infinity optical system, provides excellent optical function. The ultra long working distance condenser is suitable for tissue observation in high culture dish. The illumination system used 9W LED to supply high brightness light with well considered heat spreading and safety. The main body was designed with modern looking and man-machine engineering.

A14.0205 is applicable to scientific research institution, colleges, university, medical and health, inspection and quarantine agency, agricultural, animal husbandry and dairy industry.

System	Total Magnification 100x-400x	•	•	•
	Infinity Optical System, Mechanical Tube Length $\infty$ , Conjugate Distance $\infty$	•	•	•
Head	Trinocular Head, 45° Inclined, 360° Rotatable, Interpupillary Distance 55~75mm, Light Split Switch E80:P20/E100:P0	•	•	•
Eyepiece	WF10x/22mm, Eyepiece Tube Dia. 30mm, Parfocal Distance 10mm	•	•	•
	Centering Telescope Eyepiece 10x	•	•	•
Nosepiece	Quarduple	•	•	•
Objective	LWD Infinity Plan Bright Field Objective 10x/0.25, W.D.4.27, Cover Glass 1.2mm 20x/0.40, W.D.8.0, Cover Glass 1.2mm 40x/0.60, W.D.3.5, Cover Glass 1.2mm LWD Infinity Plan Positive Phase Contrast Objective PHP2 10x/0.25, W.D.4.27mm, Cover Glass 1.2mm	•		
	LWD Infinity Plan Bright Field Objective 10x/0.25, W.D.4.27, Cover Glass 1.2mm 20x/0.40, W.D.8.0, Cover Glass 1.2mm 40x/0.60, W.D.3.5, Cover Glass 1.2mm LWD Infinity Plan Polarizing Modulation Contract (PMC) Objective 20x/0.4, Cover Glass 1.2mm		•	
	LWD Infinity Plan Bright Field Objective 40x/0.60, W.D.3.5, Cover Glass 1.2mm LWD Infinity Plan Differential Interference Contrast (DIC) Objective 5x/0.12, Cover Glass 1.2mm 10x/0.25, Cover Glass 1.2mm 20x/0.30, Cover Glass 1.2mm			•
	Phase Contrast Slide, For 10x,20x,40x Objectives, Center Adjustable	•		
Phase Contrast	Polarizing Modulation Contract (PMC) Slide, Slit Center Adjustable		•	
	Differential Interference Contrast (DIC) Slide, Interference Light Adjustable			•
	Focus	Coaxial Coarse & Fine Focus Knob, With Tension Adjustable And Limit Stopper, Minimum Division 0.002mm, Focusing Range 11mm	•	•
Working Stage	Mechanical Stage Size 224x208mm, With Detachable Moving Stage Moving Range 112x79mm,	•	•	•
	Culture Dish Holder 86x129.5mm, For Circular Culture Dish Dia.87.5mm	•	•	•
	Culture Dish Holder 34x77.5mm, For Circular Culture Dish Dia.68.5mm	•	•	•
	Culture Dish Holder 57x82mm	•	•	•
	Moving Specimen Holder	○	○	○
	Fixed Stage Board	○	○	○
	Zeiss Style Large Moving Stage, With Multi Sizes Culture Dish Holder, With Universal Joint Moving Knob For Easily Use	○	○	○
Condenser	Long Working Distance Condenser, W.D. 70mm, With Phase Contrast Slide Slot	•	•	•
Filter	Blue Filter, Frosted Glass	•	•	•
Light source	Transmit Light High Power 9W LED, Brightness Adjustable, For Phase Contrast Observation And Ultra-Long Working Distance View In Cultrue Dish	•	•	•

# A14.1021

## Inverted Microscope

OPTO-EDU



Infinity Plan LWD Optical System Bright Field & Phase Contrast View  
Seidentopf Trinocular Head, 30° Inclined, Interpupillary 48~75mm, Diopter Adjustable  
Plain Stage 160\*250mm, Auxiliary Stage 70\*180mm, Optional Attachable Mechanical Stage  
ELWD Condenser N.A.0.3, Long Working Distance 72mm, Up to 150mm Without Condenser  
External Kohler Illumination, Halogen Lamp 6V30W, Brightness Adjustable

## 02 NOSEPIECE

Quintuple Nosepiece Under Working Stage



## 03 WORKING STAGE

Plain Stage 160\*250mm Glass Insert Plate  
Auxiliary Stage 70\*180mm



# Product Specification

## A14.1021 Inverted Laboratory Biological Microscope

Optical System	Infinity Optical System	
Head	Seidentopf Trinocular Head, 30° Inclined, Interpupillary 48~75mm, Diopter Adjustable	
Eyepiece	Extra Wide Field Eyepiece EW10x/22mm, High Eyepoint	
Nosepiece	Quintuple Nosepiece	
Objective	Infinity Plan LWD Achromatic Objective	4x/0.1, W.D.18mm
		40x/0.6, W.D.2.6mm, Cover Glass 1.2mm
	Infinity Plan Phase Contrast Achromatic Objective	PH10x/0.25, W.D.10mm
		PH20x/0.40, W.D.5.1mm
Focusing	Coaxial Coarse & Fine Adjustment, Coarse Stroke 37.7mm Per Rotation, Fine Stroke 0.2mm Per Rotation	
Working Stage	Plain Stage 160*250mm --Glass Insert Plate --Auxiliary Stage 70*180mm	
Condenser	ELWD Condenser N.A.0.3, Long Working Distance 72mm, Up to 150mm Without Condenser	
Phase Contrast	--Centering Telescope, Tube Dia.30mm --Phase Contrast Slide, 2 Holes For 10x-20x Objective	
Filter	Green, Blue, Ground Glass, Dia.45mm	
Illumination	External Kohler Illumination, Halogen Lamp 6V30W, Brightness Adjustable	
Adapter	Eyepiece Adapter Dia.23.2mm	

## A14.1021 Inverted Laboratory Biological Microscope Optional Accessories

Objective	Infinity Plan LWD Achromatic Objective	10x/0.25, W.D.10mm	A5M.1031-10
		20x/0.4, W.D.5.1mm	A5M.1031-20
Phase Contrast	Infinity Plan Phase Contrast Achromatic Objective	PH40x/0.6, W.D.0.35mm	A5C.1023-40
		Phase Contrast Slide, 3 Holes For 10x-20x-40x Objective	A5C.1013-3
Working Stage	Attachable Mechanical Stage, X-Y Coaxial Control, Moving Range 120*78mm Ergonomic Stage Knob's Height & Position Along Y-Axis Movable To Where It Is Most Comfortable, Tightness Adjustable		A54.1006-XY
		Terasaki Holder, Inner Holding Size 56x88mm	A54.1006-T
		Petri Dish Holder Dia.38mm	A54.1006-38
		Petri Dish & Slide Glass Holder Dia.54mm	A54.1006-54
		Petri Dish Holder Dia.90mm	A54.1006-90
Adapter	Photo Adapter		A55.1001
		C-Mount 1.0x	A55.1002-10
		C-Mount 0.45x	A55.1002-45
Fluorescent	Fluorescent Attachment, Upgrade to <a href="#">A16.1023</a>		A5F.1003

# A14.2701

## Inverted Microscope

**OPTO-EDU**



UCIS infinity independent achromatic optical system

One-piece construction from arm to base

Low positioned, coaxial coarse & fine focusing system with adjustable tension control and upper limit Stop

Abbe condenser N.A. 0.30 with iris diaphragm, with phase contrast slider & filter ( $\phi 34$ ) blue, green & Yellow

Right hand controls, low position, mechanical stage, size 240x260mm, moving range 135x85mm.,

Items	A14.2701 Inverted Microscope
Optical System	Ucis Infinity Independent Achromatic Optical System
Frame	One-Piece Construction From Arm To Base
Head	Seidentopf Binocular Head, 45° Inclined, Interpupillary Distance 52-75Mm, $\pm 5$ Diopter Adjustment
Eyepiece	WF10x/20mm, Plan, High Eyepoint Up To 21mm
Centering Attachment	Centering Telescope
Objective	Infinity LWD Plan Achromatic Objective 10x/0.25 W.D.9.67 Infinity LWD Plan Achromatic Objective 20x/0.40 W.D.7.97, Infinity LWD Plan Achromatic Objective 40x/0.60 W.D.3.76 Infinity LWD Plan Phase Contrast Objective 20x/0.40 WD7.97
Focus System	Low Positioned, Coaxial Coarse & Fine Focusing System with Adjustable Tension Control and Upper Limit Stop, Minimum Reading 1 $\mu$ m, Moving Range 12mm
Nosepiece	Quintuple, Reversed Type with Positive Click Stops
Condenser	Abbe Condenser N.A. 0.30 with Iris diaphragm, With Phase Contrast Slider & Filter ( $\phi 34$ ) Blue, Green & Yellow, Long Work Distance 72mm
Stage	Right Hand Controls, Low position, Mechanical Stage, Size 240x260mm, Moving Range 135x85mm. Drop Specimen Holder Dia.118mm Specimen Holder (76x26, $\phi 54$ )
Light Source	6V30W Halogen Lamp House 6V30W Power Supply Unit 6V30W Halogen Bulb (Osram) 250V/3.15A $\phi 5 \times 20$ Fuse Power Supply 110-240V, 50/60Hz
Phase Contrast Adapter	Phase Contrast Slider For 10x,20x,40x 0.5x, C-Mount
Other	Allen Screw Driver 2mm Allen Screw Driver 2.5mm Dust Cover Power Cord

A14.2701 Optional Accessories		Item No.
Head	Seidentopf Binocular Head, 45° Inclined, Interpupillary Distance 48-75mm, Diopter Adjustable	A53.2702-1A
Eyepiece	WF10x/22mm Plan Eyepiece, High Eyepoint	A51.2701-10C
	WF10x/20mm, Plan, High Eyepoint ,Reticle Eyepiece, Diopter Adjustable	A51.2701-10A1
	WF16x/13mm, Plan	A51.2701-1613
Objective	Infinity Plan Achromatic Objective 4x	A52.2706-04C
	Infinity LWD Plan Achromatic Objective 60x	A52.2706-60LB
	Infinity LWD Plan Phase-contrast Objective 10x (Positive)	A5C.2735-10PB
	Infinity LWD Plan Phase-contrast Objective 40x (Positive)	A5C.2735-40PB
	Infinity LWD Plan Phase-Contrast Objective 10x (Negative)	A5C.2735-10NB
	Infinity LWD Plan Phase-Contrast Objective 20x (Negative)	A5C.2735-20NB
	Infinity LWD Plan Phase-Contrast Objective 40x (Negative)+Slider	A5C.2735-40NB
Stage	Mechanical Stage, Size 350x208mm , Moving Range 50x50mm	A54.2706-5
Adapter	0.25x C-Mount(Used in 1/3' CCD)	A55.2701-25A
	1x C-Mount	
	Digital Camera Adapter (need to know camera brand)	A55.2702-2
Bulb	6V30W Halogen Bulb	A56.2703-30C
Specimen Holder	125x85	A54.2706-3
Fluorescence Attachment	100W DC Mercury Lamp House	A5F.2712
	Power Supply Unit for 100W DC Mercury Lamp	A5F.2713
	Epi-fluorescent Illumination,Multi-functional Semi-reflector	A5F.2714
	Fluorescent Filter UV(Superior Grade)	A5F.2710-IUV
	Fluorescent Filter V(Superior Grade)	A5F.2710-IV
	Fluorescent Filter B(Superior Grade)	A5F.2710-IB
	Fluorescent Filter G(Superior Grade)	A5F.2710-IG
	Fluorescent Filter UV(Common Grade)	A5F.2711-CUV
	Fluorescent Filter V(Common Grade)	A5F.2711-CV
	Fluorescent Filter B(Common Grade)	A5F.2711-CB
	Fluorescent Filter G(Common Grade)	A5F.2711-CG
	100W Mercury bulb	A5F.2716-H
100W Mercury bulb (Osram)	A5F.2716-I	



# A14.2702

## Inverted Microscope

**OPTO-EDU**



UCIS infinity independent achromatic optical system  
 One-piece construction from arm to base  
 Plan WF10x/20mm, high eyepoint up to 21mm, Centering telescope  
 Quintuple, reversed type with positive click stops  
 Abbe condenser N.A. 0.30 with iris diaphragm, with phase contrast slider, long work distance 72mm

Items	A14.2702 Inverted Microscope
Optical System	Ucis Infinity Independent Achromatic Optical System
Frame	One-Piece Construction From Arm To Base
Head	Seidentopf Trinocular Head, 30° Inclined, Interpupillary Distance 52-75mm, Diopter Adjustable
Eyepiece	Plan WF10x/20mm, High Eye point Up To 21mm,
Centering Attachment	Centering Telescope
Objective	Infinity LWD Plan Achromatic Objective 10x Infinity LWD Plan Achromatic Objective 20x Infinity LWD Plan Achromatic Objective 40x Infinity LWD Plan Positive Phase Contrast Objective 20x
Focus System	Coaxial Coarse And Fine Focus Mechanism With Markings, Fine Focus Sensitivity 1mm, Coarse Range 14mm
Nosepiece	Quintuple, Reversed Type With Positive Click Stops
Stage	Low Position, Mechanical Stage, Size 180X150mm, Moving Range 80X50mm. Drop Specimen Holder Dia.110mm Specimen Holder Dia. 54mm
Light Source	Abbe Condenser N.A. 0.30 With Iris Diaphragm, With Phase Contrast Slider, Long Work Distance 72mm 6V30W Halogen Lamp House Electrical Parts For 6V30W Halogen Lamp 6V30W Halogen Bulb(Osram) 250V/3.15A Φ5x20 Fuse Power Supply 110-240V 50/60Hz Blue Filter (Φ34) Green Filter (Φ34) Yellow Filter (Φ34)
Phase Contrast	Phase Contrast Slider (For 10X/20X/40X Phase Contrast And Brightfield Observation)
Adapter	1.0x C-Mount
Other	Allen Screw Driver 2mm Dust Cover Power Cord

A14.2702 Optional Accessories		Item No.
Head	Seidentopf Binocular Head, 30° Inclined, Interpupillary Distance 52-75mm, Diopter Adjustable	A53.2702-3
	Seidentopf Binocular Head, 30° Inclined, Interpupillary Distance 52-75mm, Diopter Adjustable (For FOV 22mm)	A53.2702-2B
	Seidentopf Trinocular Head, 30° Inclined, Interpupillary Distance 52-75mm, Diopter Adjustable (For FOV 22mm)	A53.2704-2A
Eyepiece	WF10x/18mm, Plan, Reticule Eyepiece, High Eyepoint Up To 21mm Diopter Adjustable	A51.2703-10
	Eyepiece 16x/13mm, Plan	A51.2701-1613A
	WF10x/22mm, Plan, High Eyepoint	A51.2701-10C
	WF10X/20mm, Reticule Eyepiece, High Eye-point, Diopter Adjustable	A51.2703-10A
Objective	Infinity LWD Plan Achromatic Objective 4x	A5M.2730-4C
	Infinity LWD Plan Achromatic Objective 60x	A5M.2730-60B
	Infinity LWD plan phase-contrast Objective 10x (positive)	A5C.2735-10PB
	Infinity LWD plan phase-contrast Objective 40x (positive)+slider	A5C.2735-40PB
	Infinity LWD Plan Phase-Contrast Objective 10x (Negative)	A5C.2735-10NB
	Infinity LWD Plan Phase-Contrast Objective 20x (Negative)	A5C.2735-20NB
	Infinity LWD Plan Phase-Contrast Objective 40x (Negative)+slider	A5C.2735-40NB
Stage	Fixed Stage, Size 240x180mm	A54.2707-4
Fluorescence Attachment	100W Mercury Lamp House	A5F.2712
	100W Power Supply Unit	A5F.2713
	100W Mercury Lamp	A5F.2716-H
	100W Mercury Lamp (Osram)	A5F.2716-I
	Excitation Filter B	A5F.2711-CAB
	Excitation Filter G	A5F.2711-CAG
	Excitation Filter UV	A5F.2711-CAUV
	Excitation Filter V	A5F.2711-CAV
Adapter	1.0x C-Mount	A55.2701-10
	0.5x C-Mount	A55.2701-05
	0.25x C-Mount (suitable for 1/3" CCD)	A55.2701-25
	Digital Camera Adapter, (Need To Know Camera Model Number)	A55.2702-2





Non-Stress Infinity Plan Objective (Transmitting)	PLAN 4x/0.10, W.D.=12.1mm	●	●			●	●	A5P.2630-4
	PLAN 10x/0.25, W.D.=4.64mm	●	●			●	●	A5P.2630-10
	PLAN 20x/0.40(S), W.D.=2.41mm	●	●			●	●	A5P.2630-20
	PLAN 40x/0.66(S), W.D.=0.65mm	●	●			●	●	A5P.2630-40
	PLAN 60x/0.8(S), W.D.=0.33mm							A5P.2630-60
	PLAN 100x/1.25(S,Oil), W.D.=0.12mm							A5P.2630-100
Non-Stress LWD Infinity Plan Objective (Reflecting)	LPL5x/0.13, W.D.=16.04mm				●	●	○	A5M.2633-5
	LPL10x/0.25 W.D.=18.48mm				●	●	○	A5M.2633-10
	LPL20x/0.40 W.D.=8.35mm				●	●	○	A5M.2633-20
	LPL50x/0.70(S) W.D.=1.95mm				●	●	●	A5M.2633-50
	LPL100x/0.90(S,Dry) W.D.=1.10mm				○	○	○	A5M.2633-100
Working Stage	Round Stage Diameter $\Phi$ 174mm, For Transmit Light, Rotatable 360°, Division 1', Vernier Division 6', Can Be Locked	●	●	○	○	●	●	A54.2602-S06
	Round Stage Diameter $\Phi$ 148mm, For Reflect Light, Rotatable 360°, Division 1', Vernier Division 6', Can Be Locked				●	●		A54.2602-S06a
	Attachable Mechanical Stage For Polaring Microscope, Moving Range 40x40mm	○	○	○	○	○	○	A5P.2616
	Attachable Mechanical Stage For Polaring Microscope, Moving Range 30x45mm, Lecia Type, Avoid Hitting Objective Lens	○	○	○	○	○	○	A5P.2616-LK
Condenser	Swing Out Condnsr, N.A.0.9/0.13, With Polarizer Lens In Bottom, With Scale, Can Be Locked	●	●			●	●	A56.2614-C10
Polarizing Unit	Analyzer Media Unit, Between Head And Body, Analyzer 0~360° Adjustable, Can Be Locked, With Bertrand Lens Built-in Focus Adjustable,	●	●	●	●	●	●	A5P.2621-BK
	Compensator Slide, With $\lambda$ Slip (First Class Red)	●	●	●	●	●	●	A5P.2614-16a
	Compensator Slide, With $\lambda/4$ Slip	●	●	●	●	●	●	A5P.2614-15a
	Quartz Wedge Slide (I-IV Class)	●	●	●	●	●	●	A5P.2615-17
	Quartz Wedge Slide (0-IV Class) Long Type	○	○	○	○	○	○	A5P.2615-17a
	Polarizer Lens, Bulit-in Bottom Part Of Condenser	●	●	●	●	●	●	A5P.2610-BK
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 22mm, Fine Focusing Div. 0.002mm	●	●	●	●	●	●	
Illumination	Transmit Light 5W LED	●	●			●	●	A56.2612-5W
	Koehler Illumination, Wide Voltage 100V~240V							
	Transmit Light 6V30W Halogen	○	○			○	○	A56.2613-30W
	Koehler Illumination, Wide Voltage 100V~240V					●	●	A56.2612-5W
	Reflect Light 5W LED					●	●	A56.2612-5W
	Koehler Illumination, Wide Voltage 100V~240V					○	○	A56.2613-50W
	Reflect Light 12V50W Halogen					○	○	A56.2613-50W
	Koehler Illumination, Wide Voltage 100V~240V					○	○	A56.2613-50W
Field Diaphragm	For Kohler Illumnation	●	●	●	●	●	●	A56.2615-BK
Power	ECO, Auto Power Off System. Power Off Automatically Upon User Leaving 10 Minutes, Power On Automatically Upon User Approaching Detected, This Function Can Be Shut Down Manually	○	○			○	○	A56.2660
Filter	Dia.45mm, Blue	○	○	○	○	○	○	A56.2616-45B
	Dia.45mm, Green	○	○	○	○	○	○	A56.2616-45G
	Dia.45mm, Yellow	○	○	○	○	○	○	A56.2616-45A
Adapter	C-Mount 0.5x, Focus Adjustable		○		○		○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable		○		○		○	A55.2601-75
	C-Mount 1.0x, Focus Adjustable		○		○		○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm		○		○		○	A55.2610
Package & Weight	Carton Size 520x470x285mm, 1 Unit/Ctn, Gross Weight: 12.5 kgs, Net Weight: 10.0 kgs							A15.2601-TB,TT
	Carton Size 520x470x430mm, 1 Unit/Ctn, Gross Weight: 16.0 kgs, Net Weight: 12.5 kgs							A15.2601-RB,RT
	Carton Size 520x470x430mm, 1 Unit/Ctn, Gross Weight: 15.0 kgs, Net Weight: 11.5 kgs							A15.2601-RTB,RTT
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories								



Non-Stress Infinity Plan Objective (Transmitting)	PLAN 4x/0.10, W.D.=12.1mm	●	●			●	●	A5P.2630-4
	PLAN 10x/0.25, W.D.=4.64mm	●	●			●	●	A5P.2630-10
	PLAN 20x/0.40(S), W.D.=2.41mm	●	●			●	●	A5P.2630-20
	PLAN 40x/0.66(S), W.D.=0.65mm	●	●			●	●	A5P.2630-40
	PLAN 60x/0.8(S), W.D.=0.33mm							A5P.2630-60
	PLAN 100x/1.25(S,Oil), W.D.=0.12mm							A5P.2630-100
Non-Stress LWD Infinity Plan Objective (Reflecting)	LPL5x/0.13, W.D.=16.04mm			●	●	○	○	A5M.2633-5
	LPL10x/0.25 W.D.=18.48mm			●	●	○	○	A5M.2633-10
	LPL20x/0.40 W.D.=8.35mm			●	●	○	○	A5M.2633-20
	LPL50x/0.70(S) W.D.=1.95mm			●	●	●	●	A5M.2633-50
	LPL100x/0.90(S,Dry) W.D.=1.10mm			○	○	○	○	A5M.2633-100
Working Stage	Round Stage Diameter $\Phi$ 174mm, For Transmit Light, Rotatable 360°, Division 1', Vernier Division 6', Can Be Locked	●	●	○	○	●	●	A54.2602-S06
	Round Stage Diameter $\Phi$ 148mm, For Reflect Light, Rotatable 360°, Division 1', Vernier Division 6', Can Be Locked					●	●	A54.2602-S06a
	Attachable Mechanical Stage For Polaring Microscope, Moving Range 40x40mm	○	○	○	○	○	○	A5P.2616
	Attachable Mechanical Stage For Polaring Microscope, Moving Range 30x45mm, Lecia Type, Avoid Hitting Objective Lens	○	○	○	○	○	○	A5P.2616-LK
Condenser	Swing Out Condnsr, N.A.0.9/0.13, With Polarizer Lens In Bottom, With Scale, Can Be Locked	●	●			●	●	A56.2614-C10
Polarizing Unit	Analyzer Media Unit, Between Head And Body, Analyzer 0~360° Adjustable, Can Be Locked, With Bertrand Lens Built-in Focus Adjustable,	●	●	●	●	●	●	A5P.2621-BK
	Compensator Slide, With $\lambda$ Slip (First Class Red)	●	●	●	●	●	●	A5P.2614-16a
	Compensator Slide, With $\lambda/4$ Slip	●	●	●	●	●	●	A5P.2614-15a
	Quartz Wedge Slide (I-IV Class)	●	●	●	●	●	●	A5P.2615-17
	Quartz Wedge Slide (0-IV Class) Long Type	○	○	○	○	○	○	A5P.2615-17a
	Polarizer Lens, Bulit-in Bottom Part Of Condenser	●	●	●	●	●	●	A5P.2610-BK
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 22mm, Fine Focusing Div. 0.002mm	●	●	●	●	●	●	
Illumination	Transmit Light 5W LED Koehler Illumination, Wide Voltage 100V~240V	●	●			●	●	A56.2612-5W
	Transmit Light 6V30W Halogen Koehler Illumination, Wide Voltage 100V~240V	○	○			○	○	A56.2613-30W
	Reflect Light 5W LED Koehler Illumination, Wide Voltage 100V~240V			●	●	●	●	A56.2612-5W
	Reflect Light 12V50W Halogen Koehler Illumination, Wide Voltage 100V~240V			○	○	○	○	A56.2613-50W
Field Diaphragm	For Kohler Illumnation	●	●	●	●	●	●	A56.2615-BK
Power	ECO, Auto Power Off System. Power Off Automatically Upon User Leaving 10 Minutes, Power On Automatically Upon User Approaching Detected, This Function Can Be Shut Down Manually	○	○			○	○	A56.2660
Filter	Dia.45mm, Blue	○	○	○	○	○	○	A56.2616-45B
	Dia.45mm, Green	○	○	○	○	○	○	A56.2616-45G
	Dia.45mm, Yellow	○	○	○	○	○	○	A56.2616-45A
Adapter	C-Mount 0.5x, Focus Adjustable		○		○		○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable		○		○		○	A55.2601-75
	C-Mount 1.0x, Focus Adjustable		○		○		○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm		○		○		○	A55.2610
Package & Weight	Carton Size 520x470x285mm, 1 Unit/Ctn, Gross Weight: 12.5 kgs, Net Weight: 10.0 kgs							A15.2601-TB,TT
	Carton Size 520x470x430mm, 1 Unit/Ctn, Gross Weight: 16.0 kgs, Net Weight: 12.5 kgs							A15.2601-RB,RT
	Carton Size 520x470x430mm, 1 Unit/Ctn, Gross Weight: 15.0 kgs, Net Weight: 11.5 kgs							A15.2601-RTB,RTT
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories								





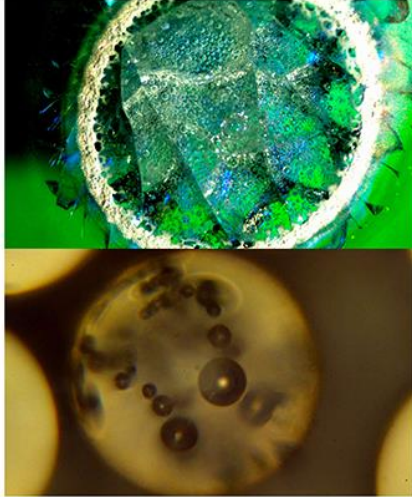
Non-Stress Infinity Plan Objective (Transmitting)	PLAN 4x/0.10, W.D.=12.1mm	●	●			●	●	A5P.2630-4
	PLAN 10x/0.25, W.D.=4.64mm	●	●			●	●	A5P.2630-10
	PLAN 20x/0.40(S), W.D.=2.41mm	●	●			●	●	A5P.2630-20
	PLAN 40x/0.66(S), W.D.=0.65mm	●	●			●	●	A5P.2630-40
	PLAN 60x/0.8(S), W.D.=0.33mm							A5P.2630-60
	PLAN 100x/1.25(S,Oil), W.D.=0.12mm							A5P.2630-100
Non-Stress LWD Infinity Plan Objective (Reflecting)	LPL5x/0.13, W.D.=16.04mm			●	●	○	○	A5M.2633-5
	LPL10x/0.25 W.D.=18.48mm			●	●	○	○	A5M.2633-10
	LPL20x/0.40 W.D.=8.35mm			●	●	○	○	A5M.2633-20
	LPL50x/0.70(S) W.D.=1.95mm			●	●	●	●	A5M.2633-50
	LPL100x/0.90(S,Dry) W.D.=1.10mm			○	○	○	○	A5M.2633-100
Working Stage	Round Stage Diameter $\Phi$ 174mm, For Transmit Light, Rotatable 360°, Division 1', Vernier Division 6', Can Be Locked	●	●	○	○	●	●	A54.2602-S06
	Round Stage Diameter $\Phi$ 148mm, For Reflect Light, Rotatable 360°, Division 1', Vernier Division 6', Can Be Locked			●	●			A54.2602-S06a
	Attachable Mechanical Stage For Polaring Microscope, Moving Range 40x40mm	○	○	○	○	○	○	A5P.2616
	Attachable Mechanical Stage For Polaring Microscope, Moving Range 30x45mm, Lecia Type, Avoid Hitting Objective Lens	○	○	○	○	○	○	A5P.2616-LK
Condenser	Swing Out Condnsr, N.A.0.9/0.13, With Polarizer Lens In Bottom, With Scale, Can Be Locked	●	●			●	●	A56.2614-C10
Polarizing Unit	Analyzer Media Unit, Between Head And Body, Analyzer 0~360° Adjustable, Can Be Locked, With Bertrand Lens Built-in Focus Adjustable,	●	●	●	●	●	●	A5P.2621-BK
	Compensator Slide, With $\lambda$ Slip (First Class Red)	●	●	●	●	●	●	A5P.2614-16a
	Compensator Slide, With $\lambda/4$ Slip	●	●	●	●	●	●	A5P.2614-15a
	Quartz Wedge Slide (I-IV Class)	●	●	●	●	●	●	A5P.2615-17
	Quartz Wedge Slide (0-IV Class) Long Type	○	○	○	○	○	○	A5P.2615-17a
	Polarizer Lens, Bulit-in Bottom Part Of Condenser	●	●	●	●	●	●	A5P.2610-BK
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 22mm, Fine Focusing Div. 0.002mm	●	●	●	●	●	●	
Illumination	Transmit Light 5W LED Koehler Illumination, Wide Voltage 100V~240V	●	●			●	●	A56.2612-5W
	Transmit Light 6V30W Halogen Koehler Illumination, Wide Voltage 100V~240V	○	○			○	○	A56.2613-30W
	Reflect Light 5W LED Koehler Illumination, Wide Voltage 100V~240V			●	●	●	●	A56.2612-5W
	Reflect Light 12V50W Halogen Koehler Illumination, Wide Voltage 100V~240V			○	○	○	○	A56.2613-50W
Field Diaphragm	For Kohler Illumnation	●	●	●	●	●	●	A56.2615-BK
Power	ECO, Auto Power Off System. Power Off Automatically Upon User Leaving 10 Minutes, Power On Automatically Upon User Approaching Detected, This Function Can Be Shut Down Manually	○	○			○	○	A56.2660
Filter	Dia.45mm, Blue	○	○	○	○	○	○	A56.2616-45B
	Dia.45mm, Green	○	○	○	○	○	○	A56.2616-45G
	Dia.45mm, Yellow	○	○	○	○	○	○	A56.2616-45A
Adapter	C-Mount 0.5x, Focus Adjustable			○	○		○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable			○	○		○	A55.2601-75
	C-Mount 1.0x, Focus Adjustable			○	○		○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm			○	○		○	A55.2610
Package & Weight	Carton Size 520x470x285mm, 1 Unit/Ctn, Gross Weight: 12.5 kgs, Net Weight: 10.0 kgs							A15.2601-TB,TT
	Carton Size 520x470x430mm, 1 Unit/Ctn, Gross Weight: 16.0 kgs, Net Weight: 12.5 kgs							A15.2601-RB,RT
	Carton Size 520x470x430mm, 1 Unit/Ctn, Gross Weight: 15.0 kgs, Net Weight: 11.5 kgs							A15.2601-RTB,RTT
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories								



# A15.2603

## Polarizing Microscope, Transmit

OPTO-EDU



Transmit 5W LED Illumination + Center Adjustable Quadruple Nosepiece  
Non-Stress Infinity Plan Objective 4x,10x,20x,40x,60x,100x Optional  
Non-Stress Abbe N.A.1.25 Condenser, Center Adjustable With Polarizer Lens In Bottom  
Round Stage Diameter Dia.142mm, Can Be Locked And Center Adjustable  
Professional Analyzer Media Unit With Bertrand Lens,  $\lambda$ ,  $\lambda/4$  Slip, Quartz Wedge.

Reflect Polarizing Unit



Analyzer Media Unit

90° 80° 70° 60° 50° 40° 30°



Quartz Wedge Slide

Compensator Slide



Non-Stress Abbe  
N.A.1.25 Condenser



Items	A15.2603 Transmit Polarizing Microscope Specification	-A	-B	Cata. No.
Head	Seidentopf Binocular Head Inclined 30°, Eyetube Rotatable 360°, Interpupillary Distance 48-75mm	●	○	A53.2621-B
	Seidentopf Trinocular Head Inclined 30°, Eyetube Rotatable 360°, Interpupillary Distance 48-75mm, , Light Split Fixed P20:E80	○	●	A53.2621-T
Eyepiece	WF10x/20mm, High Eyepoint,	●	●	A51.2602-1018
	WF10x/20mm, With Micrometer X-0.1mm*180 Div / Y-Single Line, Diopter Adjustable	●	●	A51.2605-1018D
Nosepiece	Quadruple, Backward	●	●	A54.2610-N08
Non-Stress Infinity Plan Objective	PLAN 4X/0.10, W.D.=12.1mm	●	●	A5P.2630-4
	PLAN 10X/0.25,W.D.=4.64mm	●	●	A5P.2630-10
	PLAN 20X/0.40(S),W.D.=2.41mm	●	●	A5P.2630-20
	PLAN 40X/0.66(S),W.D.=0.65mm	●	●	A5P.2630-40
	PLAN 60X/0.80(S),W.D.=0.33mm	○	○	A5P.2630-60
	PLAN 100X/1.25(S,Oil),W.D.=0.12mm	○	○	A5P.2630-100
Working Stage	Round Stage Diameter Φ142mm, Rotatable 360°, Division 1', Vernier Division 6', Can Be Locked, Center Adjustable	●	●	A54.2602-S03
	Attachable Mechanical Stage For Polaring Microscope, Moving Range 40x40mm	○	○	A5P.2616
	Attachable Mechanical Stage For Polaring Microscope, Moving Range 30x45mm, Lecia Type, Avoid Hitting Objective Lens	○	○	A5P.2616-LK
Condenser	Non-Stress Abbe N.A.1.25, Iris Diaphragm, Center Adjustable With Polarizer Lens In Bottom	●	●	A56.2614-P6
Polarizing Unit	Analyzer Media Unit, Between Head And Body, Analyzer 0~90° Adjustable, With Betrand Lens Built-in, Can Be Moved Out Of Optical Path For Single Polarizing Observe	●	●	A5P.2621-S
	Compensator Slide, 3 Holes, With λ Slip (First Class Red) + 1/4λ Slip.	●	●	A5P.2613-22a
	Quartz Wedge Slide (I-IV Class)	●	●	A5P.2615-17
	Polarizer Lens, Bult-in Bottom Part Of Condenser Can Be Moved Out Of Optical Path	●	●	A5P.2610-S
Transmit Illumination	5W LED Lamp	●	●	A56.2613-30W
	6V/30W Halogen Lamp	○	○	A56.2651-3W
Filter	Dia.45mm, Blue (Built in)	○	○	A56.2616-45B
	Dia.45mm, Green	○	○	A56.2616-45G
	Dia.45mm, Yellow	○	○	A56.2616-45A
	Dia.45mm, Neutral	○	○	A56.2616-45N
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	A55.2601-75
	C-Mount1.0x, Focus Adjustable	○	○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm	○	○	A55.2610
Package	Carton Size 570x275x450mm, 1 Unit/Ctn			
Weight	Gross Weight: 8.6 kgs, Net Weight: 7.5 kgs			
Note: "●" In Table Is Standard outfits, "○" Is Optional Accessories.				

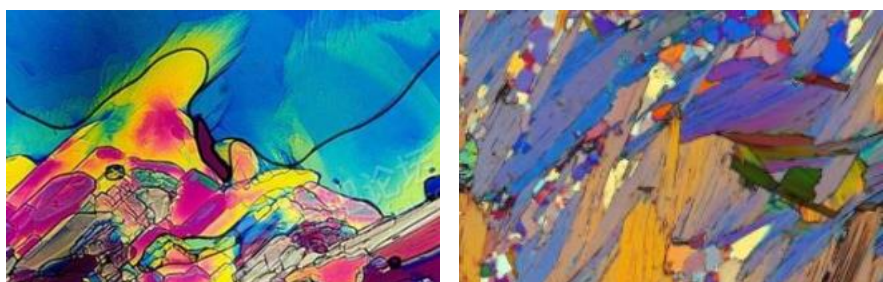
# A15.2604

## Polarizing Microscope

**OPTO-EDU**



Transmit 12V20W Halogen Illumination  
 Non-Stress Achromatic Objective 4x,10x,20x,40x,60x Optional  
 Abbe N.A.1.25, Iris Diaphragm, With Polarizer Lens In Bottom  
 Round Stage Diameter  $\Phi$ 142mm, Rotatable 360°, Can Be Locked  
 Professional Analyzer Media Unit With Bertrand Lens,  $\lambda$ ,  $\lambda/4$  Slip, Quartz Wedge



Items	A15.2604 Polarizing Microscope	
View Head	Monocular Head, Inclined 30°, Rotatable 360°	
Eyepiece	WF 10X/18mm, With Cross Micrometer 0.1mm	
Objective	Strain-free Achromatic Objective 4x,10x 40x(S)	
Nosepiece	Quadruple	
Analyzer Unit	0-90°, It Can Be Moved Out Of The Optical Path For Single Polarizing Observe	
Bertrand Lens	It Can Be Moved Out Of The Optical Path	
Polarizing	Polarizer Unit Built-in Condenser	
	Analyzer Unit Insert to Polarizing Media, Rotatable 0-90°, Can Be Moved Out Of Optical Path	
	Polarizing Media, Between Head & Body, Including Compensator:	
	--Bertrand Lens, Can Be Moved Out Of Optical Path	
	-- $\lambda$ Slip (First Class Red)	
	-- $\lambda/4$ Slip	
Stage	Round, Diameter 142mm, Rotatable 360°, Division 1°, Vernier division 6, Lockable	
Condenser	Abbe N.A. 1.25	
Polarizing Unit	It Can Be Moved Out Of The Optical Path	
Illumination	12V/20W Halogen Lamp, With Blue Filter On Light Collector	

Items	A15.2604 Polarizing Microscope Optional Accessory	
Eyepiece	WF16x/13mm	A51.2602-1613
Objective	Strain-free Achromatic Objective 20x	A5P.2629-20
	Strain-free Achromatic Objective 60x	A5P.2629-60
Compensator	Quartz Wedge I~IV Class	A5P.2615-B
Stage	Attachable Polarizing Mechanical Stage, Moving Range 40x40mm	A5P.2616
Illumination	LED Lamp, (Rechargeable Optional)	A56.2651-0.3W

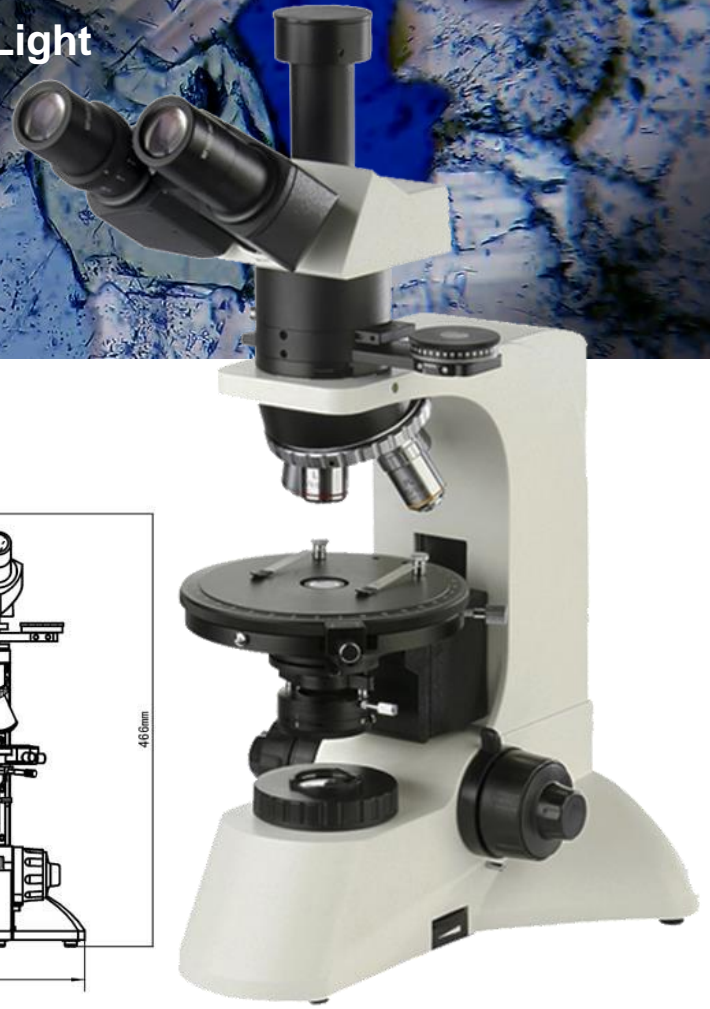
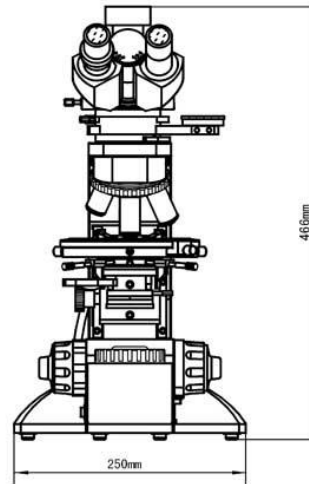
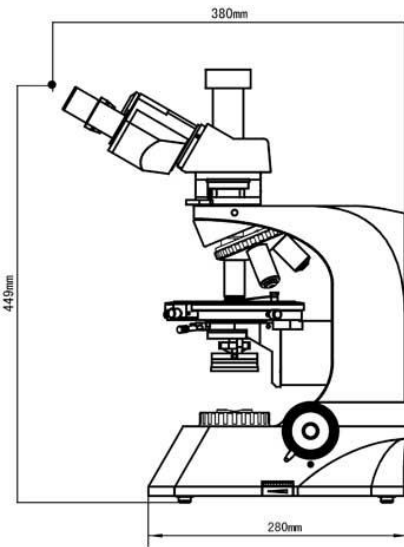
Items	A15.2603 Transmit Polarizing Microscope Specification	-A	-B	Cata. No.
Head	Seidentopf Binocular Head Inclined 30°, Eyetube Rotatable 360°, Interpupillary Distance 48-75mm	●	○	A53.2621-B
	Seidentopf Trinocular Head Inclined 30°, Eyetube Rotatable 360°, Interpupillary Distance 48-75mm, , Light Split Fixed P20:E80	○	●	A53.2621-T
Eyepiece	WF10x/20mm, High Eyepoint,	●	●	A51.2602-1018
	WF10x/20mm, With Micrometer X-0.1mm*180 Div / Y-Single Line, Diopter Adjustable	●	●	A51.2605-1018D
Nosepiece	Quadruple, Backward	●	●	A54.2610-N08
Non-Stress Infinity Plan Objective	PLAN 4X/0.10, W.D.=12.1mm	●	●	A5P.2630-4
	PLAN 10X/0.25,W.D.=4.64mm	●	●	A5P.2630-10
	PLAN 20X/0.40(S),W.D.=2.41mm	●	●	A5P.2630-20
	PLAN 40X/0.66(S),W.D.=0.65mm	●	●	A5P.2630-40
	PLAN 60X/0.80(S),W.D.=0.33mm	○	○	A5P.2630-60
	PLAN 100X/1.25(S,Oil),W.D.=0.12mm	○	○	A5P.2630-100
Working Stage	Round Stage Diameter Φ142mm, Rotatable 360°, Division 1', Vernier Division 6', Can Be Locked, Center Adjustable	●	●	A54.2602-S03
	Attachable Mechanical Stage For Polaring Microscope, Moving Range 40x40mm	○	○	A5P.2616
	Attachable Mechanical Stage For Polaring Microscope, Moving Range 30x45mm, Lecia Type, Avoid Hitting Objective Lens	○	○	A5P.2616-LK
Condenser	Non-Stress Abbe N.A.1.25, Iris Diaphragm, Center Adjustable With Polarizer Lens In Bottom	●	●	A56.2614-P6
Polarizing Unit	Analyzer Media Unit, Between Head And Body, Analyzer 0~90° Adjustable, With Bertrand Lens Built-in, Can Be Moved Out Of Optical Path For Single Polarizing Observe	●	●	A5P.2621-S
	Compensator Slide, 3 Holes, With λ Slip (First Class Red) + 1/4λ Slip.	●	●	A5P.2613-22a
	Quartz Wedge Slide (I-IV Class)	●	●	A5P.2615-17
	Polarizer Lens, Bulit-in Bottom Part Of Condenser Can Be Moved Out Of Optical Path	●	●	A5P.2610-S
Transmit Illumination	5W LED Lamp	●	●	A56.2613-30W
	6V/30W Halogen Lamp	○	○	A56.2651-3W
Filter	Dia.45mm, Blue (Built in)	○	○	A56.2616-45B
	Dia.45mm, Green	○	○	A56.2616-45G
	Dia.45mm, Yellow	○	○	A56.2616-45A
	Dia.45mm, Neutral	○	○	A56.2616-45N
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	A55.2601-75
	C-Mount1.0x, Focus Adjustable	○	○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm	○	○	A55.2610
Package	Carton Size 570x275x450mm, 1 Unit/Ctn			
Weight	Gross Weight: 8.6 kgs, Net Weight: 7.5 kgs			
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories.				



# A15.0204

## Polarizing Microscope, Transmit Light

OPTO-EDU



Trinocular Head Inclination 30° Light Split 100% For Low Light Photography  
Infinity Plan LWD Strain-free Objective For Professional Polarizing View  
Double Layer Round Stage, 360° Rotatable, Diameter 150mm  
Polarizer, Analyzer With Bertrand Lens,  $\lambda$ ,  $\lambda/4$  And Quarts Wedge Compensator  
Transmit & Reflect Light 6V30W Halogen With Field & Aperture Diaphragm

Rotatable Stage, Diameter  $\Phi 150\text{mm}$ , 360° Graduated  
(In 1° Increments), Minimum Retardation Resolution  
6' Center Adjustable And With Tightened



Polarizer 360 Degree Rotatable, Have 0,90,180,270  
Four Scale Collector For Halogen Lamp Illumination  
6V 30w, Halogen Lamp, Adjustable Brightness

# Product Specification

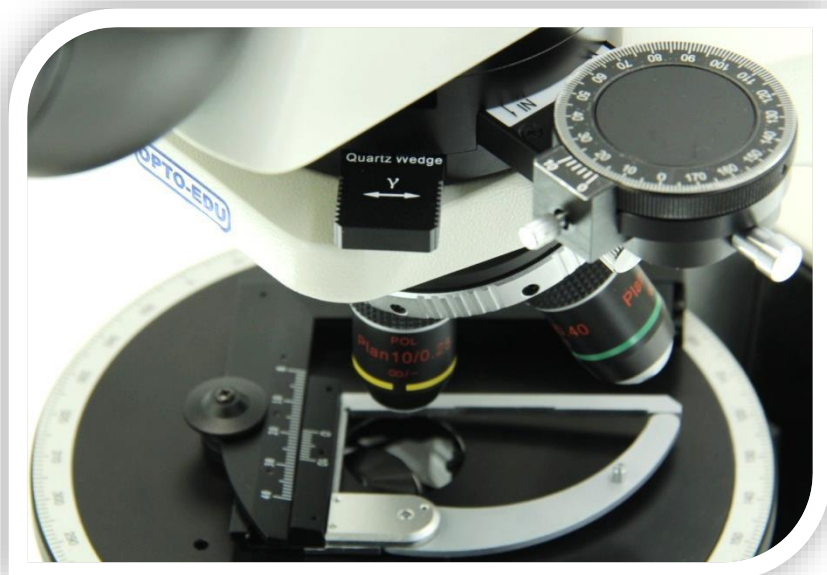
Specification	A15.0204 Polarizing Microscope	-A	-B	Cata.No.
Head	Trinocular, Inclination 30°, Rotatable 360°, Light Split Switch E100:P0/E0:P100, 100% Light To Photo Port For Low Illumination Microphotography	●	●	
Eyepiece	Wide Field WF10x/22mm	●	●	A51.0202-1022
	Dividing Eyepiece 10x/22mm, 0.10mm/Div	●	●	A51.0205-G10B
	Wide Field WF16x/11mm	○	○	A51.0203-16A
Nosepiece	Quadruple, Center Adjustable, Backward Ball Bearing Inner Locating	●	●	
	Quintuple, Center Adjustable, Backward Ball Bearing Inner Locating	○	○	A54.0203-4
Infinity Plan LWD Strain-free Objective	PL 4x/0.10, W.D. 19.8mm	●		A5P.0232-4
	PL 10x/0.25, W.D. 5.0mm	●		A5P.0232-10
	PL 20x/0.40, W.D. 8.8mm	○		A5P.0232-20
	PL 40x/0.65, W.D. 0.66mm, Spring	●		A5P.0232-40
	PL 60x/0.80, W.D. 0.45mm, Spring	●		A5P.0232-60
Infinity Plan LWD Strain-free Objective, No Cover Glass	PLL 5x/0.12, W.D. 26.1mm, No Cover Glass		●	A5P.0235-5
	PLL 10x/0.25, W.D. 20.2mm, No Cover Glass		●	A5P.0235-10
	PLL 20x/0.40, W.D. 8.80mm, No Cover Glass		○	A5P.0235-20
	PLL 40x/0.60, W.D. 3.98mm, No Cover Glass		●	A5P.0235-40
	PLL 50x/0.70, W.D. 3.68mm, No Cover Glass		○	A5P.0235-40
	PLL 60x/0.75, W.D. 2.03mm, No Cover Glass		●	A5P.0235-60
	PLL 80x/0.80, W.D. 1.25mm, No Cover Glass		○	A5P.0235-80
	PLL 100x/0.85, W.D. 0.4mm, No Cover Glass		○	A5P.0235-100
Working Stage	Double Layer Round Stage, 360° Rotatable, Diameter 150mm, 360° Graduated In 1° Increments, Minimum Resolution 6', Center Adjustable, And With Tighten Position Lock	●	●	
	Slide Moving Holder, Moving Range: 30mmX25mm	○	○	A54.0209-2
Condenser	Abbe N.A.1.25, Rack & Pinion Height Adjustable, With Iris Diaphragm	●		
Light Source	<b>Transmit</b> Illumination 6V30W Halogen Lamp, Adjustable Brightness, With Collector For Halogen Lamp Illumination	●	●	
	<b>Reflect</b> Illumination 6V30W Halogen Lamp, Adjustable Brightness, Intergrated Field Diaphragm And Aperture Diaphragm		●	
Polarizer	Polarizer On Transmit Light, 360° Rotatable, Have 0/90/180/270 Degree Scale, Set On Aperture Diaphragm, Can Take Down From Main Body	●		
	Polarizer Slide On Reflect Light, 360° Rotatable, Can Move In/Out Light Path		●	
Analyzer	Integrated Intermedia Analyzer Between Head & Main Body, Can Be Switched In/Out Light Path, Enable 0~90° Rotated At Minimum Vernier Division 12', --With Puller Bertrand Lens Slide Center Adjustable, --With $\lambda$ Compensator, $\lambda/4$ Compensator, --With Quarts Wedge Compensator		●	
	Analyzer On Reflect Light, 360° Rotatable With Scale And Minimum Vernier --With Puller Bertrand Lens Slide Center Adjustable, --With $\lambda$ Compensator, $\lambda/4$ Compensator, --With Quarts Wedge Compensator		●	
Focus System	Coaxial Coarse & Fine Focus, With Tension Adjustable And Up Stop, Fine Focusing Minimum Division 0.002mm	●	●	
CCD Adapter	0.4x	○	○	A55.0202-01
	0.5x	○	○	A55.0202-04
	1.0x	○	○	A55.0202-02
	0.5x With Dividing 0.1mm/Div	○	○	A55.0202-03
Photo Adapter	2.5x/4x Change Over Photograph Attachment With 10x Photo Eypiece	○	○	A55.0201-01
	4x Focusing Photograph Attachment	○	○	A55.0201-02
	MD Adapter	○	○	A55.0201-03
	PK Adapter	○	○	A55.0201-04
	Digital Camera Adapter For Canon EF ditigal SLR Camera Adapter	○	○	A55.0204-02



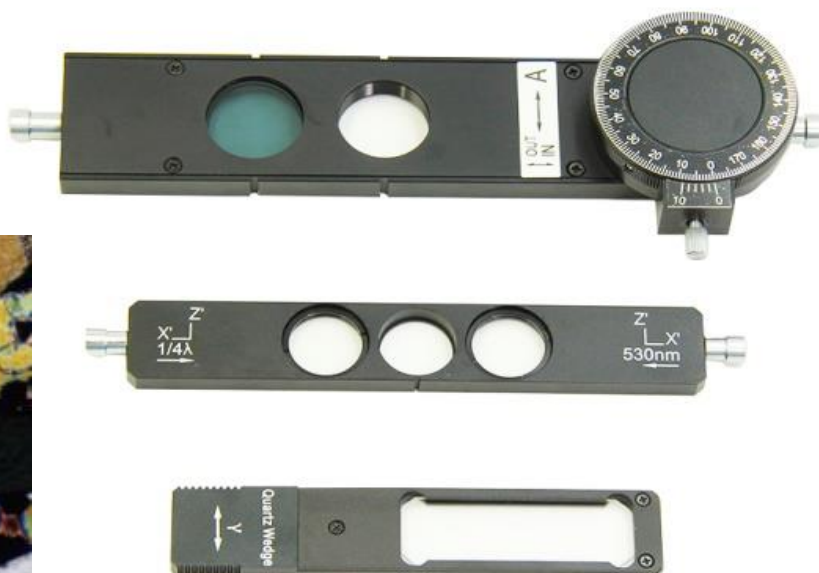
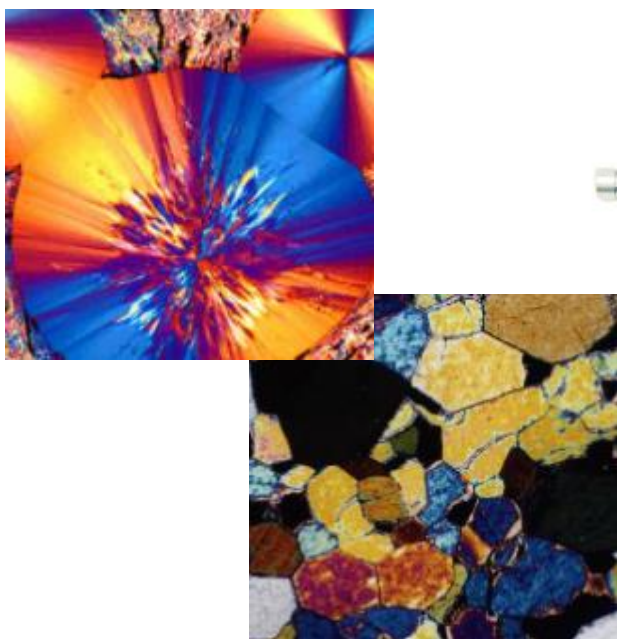
# A15.0701-T

## Polarizing Microscope, Transmit

OPTO-EDU



Swing-out NA0.9/0.25 Abbe Condenser With Iris Diaphragm & Filter  
Attachable Mechanical Stage, Moving Range 30x40mm  
Bertrand Lens, Focus/Center Adjustable Sliding In/Out Of Optical Path  
Coaxial Coarse & Fine Adjustment, Range 24mm, Fine Division 0.002mm  
Attachable Mechanical Stage, Moving Range 30x40mm





# Product Specification



A15.0701-T



A15.0701-TR

Items	A15.0701 Polarizing Microscope	A15.0701-T		A15.0701-TR	
		B	T	B	T
Head	Seidentopf Binocular Viewing Head, Inclined at 30°	•		•	
	Seidentopf Trinocular Viewing Head, Inclined at 30°		•		•
Eyepiece	WF10x/20 With Cross Hair, Diopter Adjustable, Dia.23.2mm, 1pcs	•	•	•	•
	WF10x/20 With Graticule, Diopter Adjustable, Dia.23.2mm, 1pcs	•	•	•	•
	WF10x/20, Diopter Adjustable, Dia.23.2mm, 2pcs	•	•	•	•
Objective	Infinity Plan Achromatic Objective 4x, 10x for Reflected/Transmitted System	•	•	•	•
	Infinity Plan Achromatic Objective 20x, 40x, 60x for Transmitted System	•	•		
	Infinity Plan Achromatic Objective 20x, 40x, 60x for Reflected System			•	•
Nosepiece	Backward Quadruple Nosepiece, Center Adjustable	•	•	•	•
Focusing	Coaxial Coarse & Fine Adjustment, Range 24mm, Fine Division 0.002mm	•	•	•	•
Stage	Attachable Mechanical Stage, Moving Range 30x40mm	•	•	•	•
	Diameter Φ160mm, Graduated in 1° Increments, Minimum resolution 6' when using vernier scale	•	•	•	•
Analyzer	Rotatable Analyzer With Gradation 0°-360°	•	•	•	•
Polarizer	360° Rotatable Under The Condenser	•	•	•	•
Bertrand Lens	Bertrand Lens, Focus/Center Adjustable Sliding In/Out Of Optical Path	•	•	•	•
Optical Compensator	λ Slip (First Class Red) , 1/ 4λ Slip, Quartz Wedge	•	•	•	•
Condenser	Swing-out NA0.9/0.25 Abbe Condenser With Iris Diaphragm & Filter	•	•	•	•
Transmit Light	12V/20W Halogen Lamp, Brightness Adjustable, With Filter, Upgradable To 5W LED	•	•	•	•
Reflect Light	12V/50W Halogen Lamp With Iris Aperture Diaphragm And Iris Field Diaphragm, Brightness Adjustable			•	•
Adapter	C-Mount 0.4x		○		○
Filter	Blue Filter	○	○	○	○

Note: "•" In Table Is Standard Outfits, "○" Is Optional Accessories.

# A15.0701-TR

Polarizing Microscope, Transmit & Reflect

OPTO-EDU



Swing-out NA0.9/0.25 Abbe Condenser With Iris Diaphragm & Filter  
Bertrand Lens, Focus/Center Adjustable Sliding In/Out Of Optical Path  
12V/50W Halogen Lamp With Iris Aperture Diaphragm And Iris Field Diaphragm, Brightness Adjustable  
Attachable Mechanical Stage, Moving Range 30x40mm  
Rotatable Analyzer With Gradation 0°-360°, 360° Rotatable Under The Condenser



Light Source Cover Removable For Easy Repair



12V/50W Halogen With Iris Aperture Diaphragm, Iris Field Diaphragm

# Product Specification



A15.0701-T



A15.0701-TR

Items	A15.0701 Polarizing Microscope	A15.0701-T		A15.0701-TR	
		B	T	B	T
Head	Seidentopf Binocular Viewing Head, Inclined at 30°	•		•	
	Seidentopf Trinocular Viewing Head, Inclined at 30°		•		•
Eyepiece	WF10x/20 With Cross Hair, Diopter Adjustable, Dia.23.2mm, 1pcs	•	•	•	•
	WF10x/20 With Graticule, Diopter Adjustable, Dia.23.2mm, 1pcs	•	•	•	•
	WF10x/20, Diopter Adjustable, Dia.23.2mm, 2pcs	•	•	•	•
Objective	Infinity Plan Achromatic Objective 4x, 10x for Reflected/Transmitted System	•	•	•	•
	Infinity Plan Achromatic Objective 20x, 40x, 60x for Transmitted System	•	•		
	Infinity Plan Achromatic Objective 20x, 40x, 60x for Reflected System			•	•
Nosepiece	Backward Quadruple Nosepiece, Center Adjustable	•	•	•	•
Focusing	Coaxial Coarse & Fine Adjustment, Range 24mm, Fine Division 0.002mm	•	•	•	•
Stage	Attachable Mechanical Stage, Moving Range 30x40mm	•	•	•	•
	Diameter Φ160mm, Graduated in 1° Increments, Minimum resolution 6' when using vernier scale	•	•	•	•
Analyzer	Rotatable Analyzer With Gradation 0°-360°	•	•	•	•
Polarizer	360° Rotatable Under The Condenser	•	•	•	•
Bertrand Lens	Bertrand Lens, Focus/Center Adjustable Sliding In/Out Of Optical Path	•	•	•	•
Optical Compensator	λ Slip (First Class Red) , 1/ 4λ Slip, Quartz Wedge	•	•	•	•
Condenser	Swing-out NA0.9/0.25 Abbe Condenser With Iris Diaphragm & Filter	•	•	•	•
Transmit Light	12V/20W Halogen Lamp, Brightness Adjustable, With Filter, Upgradable To 5W LED	•	•	•	•
Reflect Light	12V/50W Halogen Lamp With Iris Aperture Diaphragm And Iris Field Diaphragm, Brightness Adjustable			•	•
Adapter	C-Mount 0.4x		○		○
Filter	Blue Filter	○	○	○	○

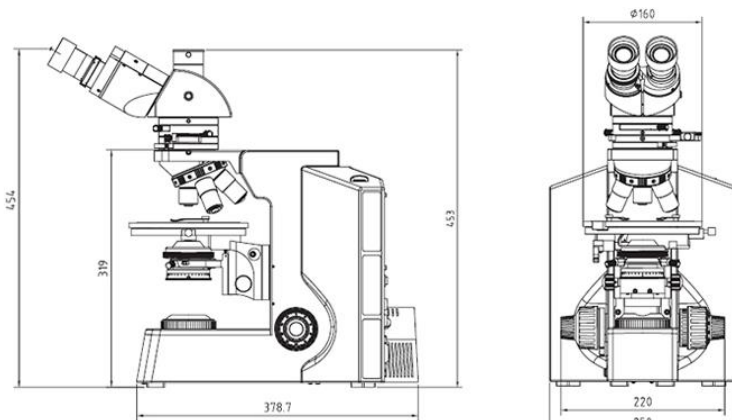
Note: "•" In Table Is Standard Outfits, "○" Is Optional Accessories.



# A15.0908

## Polarizing Microscope

**OPTO-EDU**



Infinity Color Corrected Optical System

Pluggable Analyzer, 360° Rotatable, 2° Increments, Precision 6', With Locking Device

Circular Metal Stage Dia.160mm, Graphite Coating, 360° Rotatable, 1° Increment, Precision 6'

Reflected Light, 12V/50W Halogen Lamp House, Imported Bulb, Center presetting,

Transmitted Light, 12V/50W Halogen Lamp House, Imported Bulb, Center Presetting,

### A15.0908 Polarizing Microscope

T R RT

Optical System	Infinity Color Corrected Optical System		
Head	Compensation Binocular Head, 30° Inclined, 360° Rotatable, Interpupillary Distance 54-75mm, Diopter +/-5 Adjustable.		
Eyepiece	High Eye-point Wide Field Plan Eyepiece PL10x22mm		
Objective	Infinity Plan Destressing Objectives 4x, 10x, 40x, 60x	•	
	LWD Infinity Plan Destressing Objectives 5x, 10x, 20x, 50x		•
Nosepiece	4 Holes Revolving Nosepiece, Inward, Center Adjustable		
Intermediate Tube	With Removable Internal Bertrand Lens, Analyzer And Compensators. Bertrand Lens With Rotating Switch, Focusing Recyclable, Center Adjustable		
Analyzer	Pluggable Analyzer, 360° Rotatable, 2° Increments, Precision 6', With Locking Device		
Compensator	Gyps 1λ ( Φ18mm, Optical Path Difference 551nm ) ;		
	Mical 1/4λ (Φ18mm, Optical Path Difference 147.3nm);		
	Quartz Wedge ( I-IV )		
Focusing	Coaxial Focus System With Upper Limited And Tension Adjustment; Coarse Range 25mm; Fine Precision 0.002mm		
Stage	Circular Metal Stage Dia.160mm, Graphite Coating, Anti-corrosive And Anti-friction, 360° Rotatable, 1° Increment, Precision 6'		
Condenser	Swing-out Achromatic Condenser N.A.0.9, With 360° Rotatable Polarizer, Four Adjustable Scale: 0/90/180/270		
Light Source	Reflected Light, 12V/50W Halogen Lamp House, Imported Bulb, Center presetting, Reflected Illuminator With LBD Filter And Pluggable Polarizer, Field Diaphragm And Aperture Diaphragm Adjustable		•
	Transmitted Light, 12V/50W Halogen Lamp House, Imported Bulb, Center Presetting, With Iris Diaphragm, Filter For Transmitted Light Yellow, Neutral, IF550, LBD	•	•
Power	Wide Range Voltage 100~240V AC 50/60Hz		



**With Bayonet For Fixing Eyepiece**

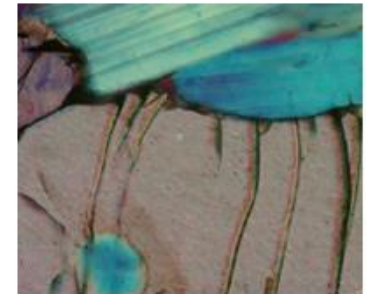
For Polarizing Observation, The East-West Vibrating Axis And South-North Axis Should Be In Line With Vertical and Horizontal Scale Line Of Reticle In The Eyepiece



**Professional Measuring Stage Is Optional**

**Big Circle Metal Working Stage**

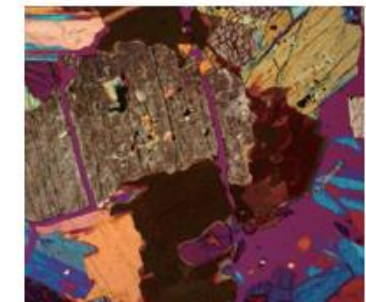
Dia. 160mm, 360° Rotatable, With Position Lock, With Anti-corrosive And Anti-friction Graphite Coating. The Scale Is Silk-printed By Special Material Which Won't Be Fade Or Wear-out After Long Time Operation



**N.A.1.25 Swing-out Achromatic Condenser**  
Center Adjustable, Horizontally Insert, Vertically Raise. Adjustable Aperture Diaphragm With Scale Remedies The Disadvantage Of Fixed Condenser, Provides Ample Uniform Light And Clear Image For Different Magnification Observation

**Low Position Focusing Knob**

For Comfortable Operation, With Upper Limited And Tension Adjustable Function, Help To Protect Slides And Objective Lens



**A15.0908 Polarizing Microscope**

**Optional Accessories**

A15.0908 Polarizing Microscope Optional Accessories		
Eyepiece	High Eye-point PL10x/22mm with Micrometer, Diopter Adjustable	A51.0905-1022R
	High Eye-point PL15x/16mm	A51.0903-1516
Working Stage	Attachable Mechanical Moving Stage For Circular Stage, Moving Range: 30mm*40mm; High Precision Micrometer, 0.01mm Increment	A54.0946
CCD Adapter	1x C-Mount, Focus Adjustable	A55.0926-10
	0.50x, For 1/2" C-Mount, Focus Adjustable	A55.0926-50
	0.67x, For 2/3" C-Mount, Focus Adjustable	A55.0926-67



# A15.1302

## Polarizing Microscope

**OPTO-EDU**



Economical Polarizing Microscope With Full Polarizing Function  
 Round Stage Dia.120mm 360° Rotatable Minimum 6' Scale  
 Polarizer On Light Collector 360° Rotatable  
 Analyzer Medium Unit With Optical Compensator  $\lambda$  Slip (First Class Red),  $1/4\lambda$  Slip  
 Transmit Light 1W LED Brightness Adjustable

Items	A15.1302-A	A15.1302-B	A15.1302-C
Head	Monocular Head, 30° Inclined	Binocular Head, 30° Inclined, Interpupillary Distance 55~75mm	Trinocular Head, 30° Inclined, Interpupillary Distance 55~75mm
Eyepiece	WF10x/18mm, With Retical 0.1mm/Div	WF10x/18mm, High Eyepoint, 1pc WF10x/18mm, With Retical 0.1mm/Div, 1pc	WF10x/18mm, High Eyepoint, 1pc WF10x/18mm, With Retical 0.1mm/Div, 1pc
Nosepiece	Backward, Quadruple Nosepiece		
Objective	Achromatic 4x,10x,40x(S),100x(O,S), 45mm DIN		
Working Stage	Round Stage Dia 120mm, 360° Rotatable, Graduation 1° Increment, Minimum Resolution 6', When Using Venire Scale Center Adjustable		
Condenser	Abbe N.A.1.25, With Dia 2~30mm Iris Diaphragm, With Filter Dia.32mm		
Focusing	Coarse & Fine Focusing Knob, Range 14mm, Minimum Division Of Fine Focusing 0.01mm		
Light	Build-in LED, 3.5V/1W, Brightness Adjustable.		
Polarizing	Polarizer: On Light Collector, 360° Rotatable		
	Analyzer: Rotatable With Graduation 0~90°, Can Be Slided Out of Optical Path		
	Optical Compensator :		
	-- $\lambda$ Slip (First Class Red) -- $1/4\lambda$ Slip		



# A15.1017

## Polarizing Microscope

**OPTO-EDU**



Polarizer, Sliding In/Out of Optical Path, On Top Of Collector

Outward Quadruple Nosepiece, Center Adjustable  
 Strain Free Achromatic Objective 4x,10x,40x For Polarizing View  
 Round Stage Dia.160mm, 360° Rotatable Center Adjustable  
 Polarizer On Collector, Can Switch Out Of Light Path  
 Analyzer Unit With Bertrand Lens,  $\lambda$  Slip,  $1/4\lambda$  Slip, Quartz Wedge

Items	A15.1017 Polarizing Microscope	B	T
Head	Sliding Binocular Head, 45° Inclined, 360° Rotatable	o	
	Sliding Trinocular Head, 45° Inclined, 360° Rotatable		o
Eyepiece	WF10x/18mm		
	WF10x/18mm, With Scale Of Crosshair		
Objective	Strain Free Achromatic Objective 4x,10x,40x		
Nosepiece	Outward Quadruple Nosepiece, Center Adjustable		
Analyzer	Rotatable Analyzer With Graduation 0~90° Bertrand Lens, Sliding In/Out Of Optical Path Optical Compensator : -- $\lambda$ Slip, First Class Red -- $1/4\lambda$ Slip -- Quartz Wedge		
Working Stage	Round Stage Dia.160mm, 360° Rotatable, Graduation 1° Increment, Minimum Resolution 6', Center Adjustable		
Focusing	Coaxial Coarse & Fine Adjustment, Focusing Range 28mm, Fine Focusing Division 0.002mm		
Condenser	Abbe Condenser N.A.1.25, With Iris Diaphragm & Filter		
Polarizer	Swing-Out Polarizer 0~90° Rotatable, Located On Top Of Collector		
Illumination	Halogen Lamp 6V20W, Brightness Adjustable		

# A15.1018

## Polarizing Microscope, Transmit Light

**OPTO-EDU**



Quintuple Nosepiece Center Adjustable  
 Strain-free Infinity Plan Objectives 4x10x40x100x  
 Round Stage Dia.170mm Center Adjustable  
 Analyzer Unit With Bertrand Lens,  $\lambda$  Slip,  $1/4\lambda$  Slip, Quartz Wedge  
 Transmit Halogen 24V100W Brightness Adjustable

Items	A15.1018 Transmit Polarizing Microscope	
Optical System	Infinity Optical System	
Head	Seidentopf Trinocular Head, 30° Inclined, Interpupillary 48~75mm, Diopter Adjustable	
Eyepiece	Plan Eyepiece EW10x/22mm, Eyepiece Tube Dia.30mm	
	Plan Eyepiece With Scale of Crosshair	
	Plan Eyepiece With Cross	
	Plan Eyepiece With Gridding	
Objective	Strainfree Infinity Plan Achromatic Objective	
	4x/0.10/∞/- W.D.17.3mm	
	10x/0.25/∞/0.17 W.D.10mm	
	40x/0.65/∞/0.17 W.D.0.54mm	
Nosepiece	100x/1.25/∞/0.17 W.D.0.13mm	
	Backward Quintuple Nosepiece, Center Adjustable	
Analyzer	360° Dial Rotation Analyzer, Minimum Scale Reading 0.1° (Vernial Scale) Switch Between Orthoscopic And Conoscopic Observation Bertrand Lens Postion Adjustable Optical Compensator: $\lambda$ Slip (First Class Red), $1/4\lambda$ Slip, Quartz Wedge	
Working Stage	Polarizing Rotatable Stage, Dia.170mm, Center Adjustable 360° Scale, Minimum Division 1° Minimum Reading 6' By Means of Vernial Scale 45° Click Stop Knob	
Condenser	Strainfree Swing Condenser N.A.0.95/0.25	
Focusing	Coaxial Coarse & Fine Adjustment, Focusing Range 32mm, Fine Division 0.001mm, Coarse Stroke 37.7mm Per Rotation, Fine Stroke 0.1mm Per Rotation	
Polarizer	360° Rotatable, 0° Position Adjustable	
Filter	Blue Filter, Dia.45mm	
Illumination	Transmit Illumination Halogen Lamp 24V100W, Brightness Adjustable	

A15.1018 Transmit Polarizing Microscope Optional Accessories		
Objective	Strainfree Infinity Plan Achromatic Objective 20x/0.4/∞/- W.D. 5.1mm	A5P.1030-20
Stage	Attachable Stage, Moving Range 30*40mm	A54.1008
Filter	Netural Filter ND25	A5F.1011-25
	Netural Filter ND26	A5F.1011-6
Adapter	Photo Adapter	A55.1001
	C-Mount 1.0x	A55.1002-10



# A15.1019

## Polarizing Microscope, Reflect & Transmit Light

OPTO-EDU



Polarizing Rotatable Stage, Center Adjustable  
Minimum Reading 6' By Means of Vernier Scale  
45° Click Stop Knob

Quintuple Nosepiece Center Adjustable  
LWD Strain-free Infinity Plan Objectives 5x10x40x100x  
Round Stage Dia.170mm Center Adjustable  
Analyzer Unit With Bertrand Lens,  $\lambda$  Slip,  $1/4\lambda$  Slip, Quartz Wedge  
Transmit & Reflect Halogen 24V100W Brightness Adjustable

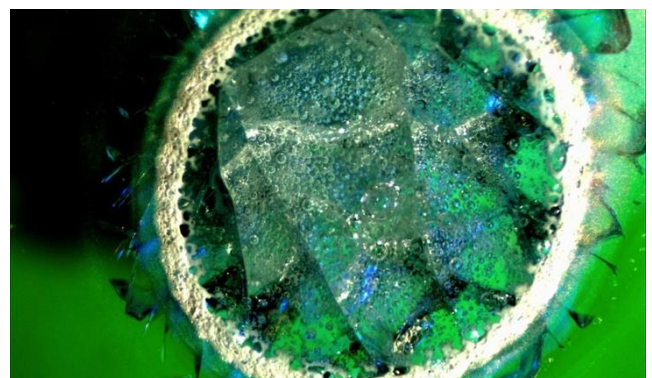
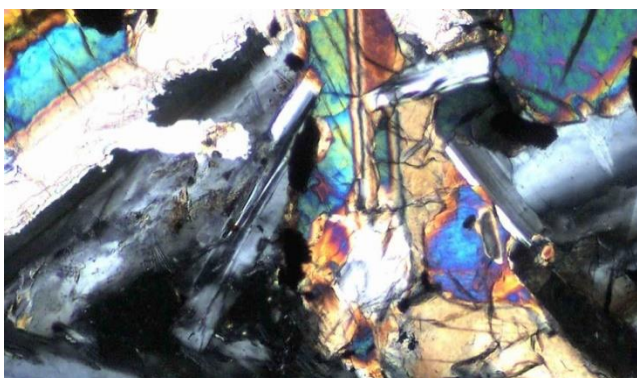
### A15.1019 Reflect, Reflect & Transmit Polarizing Microscope Optional Accessories

A15.1019 Reflect, Reflect & Transmit Polarizing Microscope Optional Accessories			
Stage	Attachable Stage, Moving Range 30*40mm		A53.1003-7
Filter	For Transmit Light:	Neutral Filter ND25, Dia.45mm	A5F.1011-25
		Neutral Filter ND6, Dia.45mm	A5F.1011-6
	For Reflect Light:	Blue Filter, Dia.25mm	A56.1008-B
		Neutral Filter ND25, Dia.25mm	A5F.1011-25A
		Neutral Filter ND6, Dia.25mm	A5F.1011-6A
Adapter	Photo Adapter		A55.1001
	C-Mount 1.0x		A55.1002-10
	C-Mount 0.5x		A55.1002-05



# Product Specification

Items	A15.1019 Reflect, Reflect & Transmit Polarizing Microscope		A	B
Optical System	Infinity Optical System			
Head	Seidentopf Trinocular Head, 30° Inclined, Interpupillary 48~75mm, Diopter Adjustable			
Eyepiece	Plan Eyepiece EW10x/22mm, Eyepiece Tube Dia.30mm			
	Plan Eyepiece With Scale of Crosshair			
	Plan Eyepiece With Cross Plan Eyepiece With Gridding			
Nosepiece	Backward Quintuple Nosepiece			
Objective	Strainfree LWD Infinity Plan Achromatic Objective	5x/0.12/∞/- W.D.15.5mm		
		10x/0.25/∞/- W.D.10mm		
		20x/0.4/∞/0 W.D.4.3mm		
		50x/0.75/∞/0 W.D.0.32mm		
	100x/0.8/∞/0 W.D.2mm			
	Strainfree Infinity Plan Achromatic Objective	40x/0.65/∞/0.17 W.D.0.54mm	-	o
	100x/1.25/∞/0.17 W.D.0.13mm	-	o	
Nosepiece	Backward Quintuple Nosepiece, Center Adjustable			
Analyzer	360° Dial Rotation Analyzer, Minimum Scale Reading 0.1° (Vernial Scale) --Switch Between Orthoscopic And Conoscopic Observation --Bertrand Lens Postion Adjustable --Optical Compensator: λ Slip (First Class Red), 1/4λ Slip, Quartz Wedge			
Working Stage	Polarizing Rotatable Stage, Dia.170mm, Center Adjustable 360° Scale, Minimum Division 1° Minimum Reading 6' By Means of Vernial Scale 45° Click Stop Knob			
Condenser	Strainfree Swing Condenser N.A.0.95/0.25			
Focusing	Coaxial Coarse & Fine Adjustment, Focusing Range 32mm, Fine Division 0.001mm, Coarse Stroke 37.7mm Per Rotation, Fine Stroke 0.1mm Per Rotation			
Polarizer	For Reflect: Fixed Polarizer			
	For Transmit: 360° Rotatable Polarizer, 0° Position Adjustable			-
Illumination	Reflect Light Halogen Lamp 24V100W, Brightness Adjustable			
	Transmit Light Halogen Lamp 24V100W, Brightness Adjustable Blue Filter, Dia.45mm			-



# A16.2601 Fluorescent Microscope

**OPTO-EDU**



Six Holes Fluorescent Turret

Six Holes Fluorescent Unit Can Hold Up To 5 Fluorescent Filter + Bright Field View  
 100W Mercury Fluorescent Light Source For Observe In Pathology, Clinical Lab Use  
 Creative 100x Water Objective Instead Of 100x Oil Objective For Easy Use Without Oil  
 High Rigidity Body Structure Design Supply High Steady And Easy Handle  
 Different Color Available To Customize Your Model!



Items	A16.2601 Fluorescent Microscope Specification	-B2	-T2	-B4	-T4	Cata. No.
Head	Seidentopf Binocular Head Inclined 30°,Rotatable 360°, Interpupillary Distance 48-75mm	●	○	●	○	A53.2621-B
	Seidentopf Trinocular Head Inclined 30°,Rotatable 360°, Interpupillary Distance 48-75mm, , Light Split Fixed P20:E80	○	●	○	●	A53.2621-T
Eyepiece	WF10X/20mm (High Eyepoint)	●●	●●	●●	●●	A51.2602-1020
Nosepiece	Quadruple, Backward	●	●	●	●	A54.2610-N734
	Quintuple, Backward	○	○	○	○	A54.2610-N735

Infinity E-Plan Objective	EPLAN 4x/0.10,W.D.=12.1mm	●	●	●	●	A52.2605-4	
	EPLAN 10x/0.25,W.D.=4.14mm	●	●	●	●	A52.2605-10	
	EPLAN 40x/0.65(S),W.D.=0.58mm	●	●	●	●	A52.2605-40	
	EPLAN 100x/1.25(S, Oil),W.D.=0.19mm	●	●	●	●	A52.2605-100	
Infinity Plan Semi-APO Fluorescent Objective	UplanFLN 4x, N.A.0.16, W.D.=17.151mm	○	○	○	○	A5F.2611-4	
	UplanFLN 10x, N.A.0.30, W.D.=7.68mm	○	○	○	○	A5F.2611-10	
	UplanFLN 20x, N.A.0.50, W.D.=1.96mm	○	○	○	○	A5F.2611-20	
	UplanFLN 40x, N.A.0.75, W.D.=0.78mm	○	○	○	○	A5F.2611-40	
	UplanFLN 100x(Oil), N.A.1.30, W.D.=0.15mm	○	○	○	○	A5F.2611-100	
Working Stage	Mechanical Stage Size: 145 mm×140mm, Travel: 76mmX52mm, Scale: 0.1mm, Double Slide Holder	●	●	●	●	A54.2601-S04	
	Rackless (Integrated) Stage, Size 140×135mm, Travel Range 75×35mm, Double Slide Holder	○	○	○	○	A54.2601-S12	
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 26mm, Fine Focusing Travel Range: 2µm/Division	●	●	●	●		
Condenser	Abbe Condenser N.A.1.25, Iris Diaphragm, Rack & Pinion Up/Down	●	●	●	●	A56.2614-C06b	
Illumination	3W-LED Illumination Systems	●	●	●	●	A56.2613-3W	
	12V/20W Halogen Lamp	○	○	○	○	A56.2650-20W	
	6V/30W Halogen Lamp	○	○	○	○	A56.2650-30W	
Field Diaphragm	Upgrade To Kohler Illumination	○	○	○	○	A56.2615-S	
Filter	Dia.45mm, Blue	○	○	○	○	A56.2616-45B	
	Dia.45mm, Green	○	○	○	○	A56.2616-45G	
	Dia.45mm, Yellow	○	○	○	○	A56.2616-45A	
Dark Field	Dark Field Condenser, Dry, N.A.0.83-0.91, For 4x10x40x Objective	○	○	○	○	A5D.2610-S	
Polarizing	Analyzer + Polarizer Set	○	○	○	○	A5P.2601-S	
Phase Contrast	Infinity Plan Phase Contrast Objective 10x + Phase Contrast Slide	○	○	○	○	A5C.2601-10	
	10x + Phase Contrast Condenser + Telescope 11x + Green Filter						
	Infinity Plan Phase Contrast Objective 20x + Phase Contrast Slide	○	○	○	○	A5C.2601-20	
	20x + Phase Contrast Condenser + Telescope 11x + Green Filter						
	Infinity Plan Phase Contrast Objective 40x + Phase Contrast Slide	○	○	○	○	A5C.2601-40	
	40x + Phase Contrast Condenser + Telescope 11x + Green Filter						
Fluorescence Unit	Infinity Plan Phase Contrast Objective 100x + Phase Contrast Slide	○	○	○	○	A5C.2601-100	
	100x + Phase Contrast Condenser + Telescope 11x + Green Filter						
	Turret Phase Contrast Attachment						
Fluorescence Unit	Infinity Plan Phase Contrast Objective 10x20x40x100x, Turret	○	○	○	○	A5C.2603-S	
	Phase Contrast Condenser 5-Holes, Telescope 11x, Green Filter						
Fluorescence Unit	Upgrade From A12.2601-C/CT Biological Microscope With: B,G China Fluorescent Set 100W Mercury Lamp House 100W Mercury Power Box, Digital Disp. 6 Holes Disc Fluorescent Unit Ultraviolet Protection Barrier Centering Objective	●	●			A5F.2601-2	
	China 100W Mercury Lamp 2 pcs						
Fluorescence Unit	Upgrade From A12.2601-C/CT Biological Microscope With: B,G,U,UV China Fluorescent Set 100W Mercury Lamp House 100W Mercury Power Box, Digital Disp. 6 Holes Disc Fluorescent Unit Ultraviolet Protection Barrier Centering Objective				●	●	A5F.2601-4
	China 100W Mercury Lamp 2 pcs						
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	○	○	A55.2601-05	
	C-Mount 0.75x, Focus Adjustable	○	○	○	○	A55.2601-75	
	C-Mount1.0x, Focus Adjustable					A55.2601-10	
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm					A55.2610	
Mirror	Reflecting Mirror & Holder	○	○	○	○	A56.2601	
Attachment	Wire Winding Device	○	○	○	○	A50.2602-S	
Package	Carton Size 970×340×440mm, 1 pc / Ctn						
Weight	Gross Weight: 22 kgs, Net Weight: 18 kgs						
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories							



# A16.2601-L LED Fluorescent Microscope

**OPTO-EDU**



Six Holes Fluorescent Turret

Six Holes Fluorescent Unit Can Hold Up To 5 Fluorescent Filter + Bright Field View  
 5W LED Fluorescent Light Source For Observe In Pathology, Clinical Lab Use  
 Creative 100x Water Objective Instead Of 100x Oil Objective For Easy Use Without Oil  
 High Rigidity Body Structure Design Supply High Steady And Easy Handle  
 Different Color Available To Customize Your Model!



A5P.2601-S  
Analyzer +  
Polarizer Set



A5C.2603-S  
Turret Phase Contrast Attachment

Items	A16.2601-L LED Fluorescent Microscope Specification	-B2	-T2	-B4	-T4	Cata. No.
Head	Seidentopf Binocular Head Inclined 30°,Rotatable 360°, Interpupillary Distance 48-75mm	●	○	●	○	A53.2621-B
	Seidentopf Trinocular Head Inclined 30°,Rotatable 360°, Interpupillary Distance 48-75mm, Light Split Fixed P20:E80	○	●	○	●	A53.2621-T

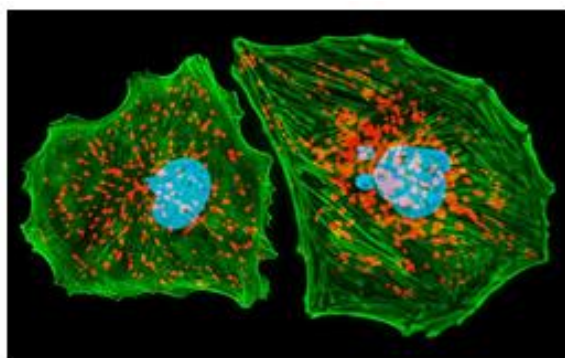
Eyepiece	WF10X/20mm (High Eyepoint)	●●	●●	●●	●●	A51.2602-1020
Nosepiece	Quadruple, Backward	●	●	●	●	A54.2610-N734
	Quintuple, Backward	○	○	○	○	A54.2610-N735
Infinity E-Plan Objective	EPLAN 4x/0.10,W.D.=12.1mm	●	●	●	●	A52.2605-4
	EPLAN 10x/0.25,W.D.=4.14mm	●	●	●	●	A52.2605-10
	EPLAN 40x/0.65(S),W.D.=0.58mm	●	●	●	●	A52.2605-40
	EPLAN 100x/1.25(S, Oil),W.D.=0.19mm	●	●	●	●	A52.2605-100
Infinity Plan Semi-APO Fluorescent Objective	UplanFLN 4x, N.A.0.16, W.D.=17.151mm	○	○	○	○	A5F.2611-4
	UplanFLN 10x, N.A.0.30, W.D.=7.68mm	○	○	○	○	A5F.2611-10
	UplanFLN 20x, N.A.0.50, W.D.=1.96mm	○	○	○	○	A5F.2611-20
	UplanFLN 40x, N.A.0.75, W.D.=0.78mm	○	○	○	○	A5F.2611-40
	UplanFLN 100x(Oil), N.A.1.30, W.D.=0.15mm	○	○	○	○	A5F.2611-100
Working Stage	Mechanical Stage Size: 145 mmx140mm, Travel: 76mmX52mm, Scale: 0.1mm, Double Slide Holder	●	●	●	●	A54.2601-S04
	Rackless (Integrated) Stage, Size 140x135mm, Travel Range 75x35mm, Double Slide Holder	○	○	○	○	A54.2601-S12
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 26mm, Fine Focusing Travel Range: 2µm/Division	●	●	●	●	
Condenser	Abbe Condenser N.A.1.25, Iris Diaphragm, Rack & Pinion Up/Down	●	●	●	●	A56.2614-C06b
Illumination	3W-LED Illumination Systems	●	●	●	●	A56.2613-3W
	12V/20W Halogen Lamp	○	○	○	○	A56.2650-20W
	6V/30W Halogen Lamp	○	○	○	○	A56.2650-30W
Field Diaphragm	Upgrade To Kohler Illumination	○	○	○	○	A56.2615-S
Filter	Dia.45mm, Blue	○	○	○	○	A56.2616-45B
	Dia.45mm, Green	○	○	○	○	A56.2616-45G
	Dia.45mm, Yellow	○	○	○	○	A56.2616-45A
Dark Field	Dark Field Condenser, Dry, N.A.0.83-0.91, For 4x10x40x Objective	○	○	○	○	A5D.2610-S
Polarizing	Analyzer + Polarizer Set	○	○	○	○	A5P.2601-S
Phase Contrast	Infinity Plan Phase Contrast Objective 10x + Phase Contrast Slide 10x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	A5C.2601-10
	Infinity Plan Phase Contrast Objective 20x + Phase Contrast Slide 20x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	A5C.2601-20
	Infinity Plan Phase Contrast Objective 40x + Phase Contrast Slide 40x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	A5C.2601-40
	Infinity Plan Phase Contrast Objective 100x + Phase Contrast Slide 100x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	A5C.2601-100
	Turret Phase Contrast Attachment Infinity Plan Phase Contrast Objective 10x20x40x100x, Turret Phase Contrast Condenser 5-Holes, Telescope 11x, Green Filter	○	○	○	○	A5C.2603-S
	Fluorescence	Upgrade From A12.2601-C/CT Biological Microscope With: B,G China Fluorescent Set 6 Holes Disc Fluorescent Unit 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier	●	●		
Fluorescence	Upgrade From A12.2601-C/CT Biological Microscope With: B,G,U,UV China Fluorescent Set 6 Holes Disc Fluorescent Unit 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier			●	●	A5F.2602-4
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	○	○	A55.2601-75
	C-Mount1.0x, Focus Adjustable					A55.2601-10
	Upgrade From A12.2601-C/CT Fluorescence Microscope With:					A55.2610
Mirror	Reflecting Mirror & Holder	○	○	○	○	A56.2601
Attachment	Wire Winding Device	○	○	○	○	A50.2602-S
Package	Carton Size 970x340x440mm, 1 pc / Ctn					
Weight	Gross Weight: 22 kgs, Net Weight: 18 kgs					
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories						



# A16.2601-NL

## LED Fluorescent Microscope

OPTO-EDU



Built-in All-in-One Fluorescent Media Unit 5W LED With 1 or 2 Filters  
Semi-APO Infinity Plan Fluorescent Objective Available For High Quality Image  
Creative 100x Water Objective Instead Of 100x Oil Objective For Easy Use Without Oil  
High Rigidity Body Structure Design Supply High Steady And Easy Handle  
Different Color Available To Customize Your Model!

- **A5F.2605** Newly Designed 2020 All-in-One Built-in Media Fluorescent Device For 2 Bands





Items	A16.2601-NL LED Fluorescent Microscope Specification	-1	-2	Cata. No.
Head	Seidentopf Trinocular Head Inclined 30°, Rotatable 360°, Interpupillary Distance 48-75mm, Light Split Fixed P20:E80	●	●	A53.2621-T
Eyepiece	WF10X/20mm (High Eyepoint)	●●	●●	A51.2602-1020
Nosepiece	Quadruple, Backward	●	●	A54.2610-N734
	Quintuple, Backward	○	○	A54.2610-N735
Infinity E-Plan Objective	EPLAN 4x/0.10, W.D.=12.1mm	●	●	A52.2605-4
	EPLAN 10x/0.25, W.D.=4.14mm	●	●	A52.2605-10
	EPLAN 40x/0.65(S), W.D.=0.58mm	●	●	A52.2605-40
	EPLAN 100x/1.25(S, Oil), W.D.=0.19mm	●	●	A52.2605-100
Infinity Plan Semi-APO Fluorescent Objective	UplanFLN 4x, N.A.0.16, W.D.=17.151mm	○	○	A5F.2611-4
	UplanFLN 10x, N.A.0.30, W.D.=7.68mm	○	○	A5F.2611-10
	UplanFLN 20x, N.A.0.50, W.D.=1.96mm	○	○	A5F.2611-20
	UplanFLN 40x, N.A.0.75, W.D.=0.78mm	○	○	A5F.2611-40
	UplanFLN 100x(Oil), N.A.1.30, W.D.=0.15mm	○	○	A5F.2611-100
Working Stage	Mechanical Stage Size: 145 mm×140mm, Travel: 76mm×52mm, Scale: 0.1mm, Double Slide Holder	●	●	A54.2601-S04
	Rackless (Integrated) Stage, Size 140×135mm, Travel Range 75×35mm, Double Slide Holder	○	○	A54.2601-S12
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 26mm, Fine Focusing Travel Range: 2µm/Division	●	●	
Condenser	Abbe Condenser N.A.1.25, Iris Diaphragm, Rack & Pinion Up/Down	●	●	A56.2614-C06b
Illumination	3W-LED Illumination Systems	●	●	A56.2613-3W
	12V/20W Halogen Lamp	○	○	A56.2650-20W
	6V/30W Halogen Lamp	○	○	A56.2650-30W
Field Diaphragm	Upgrade To Kohler Illumination	○	○	A56.2615-S
Filter	Dia.45mm, Blue	○	○	A56.2616-45B
	Dia.45mm, Green	○	○	A56.2616-45G
	Dia.45mm, Yellow	○	○	A56.2616-45A
Dark Field	Dark Field Condenser, Dry, N.A.0.83-0.91, For 4x10x40x Objective	○	○	A5D.2610-S
Polarizing	Analyzer + Polarizer Set	○	○	A5P.2601-S
Phase Contrast	Infinity Plan Phase Contrast Objective 10x + Phase Contrast Slide 10x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2601-10
	Infinity Plan Phase Contrast Objective 20x + Phase Contrast Slide 20x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2601-20
	Infinity Plan Phase Contrast Objective 40x + Phase Contrast Slide 40x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2601-40
	Infinity Plan Phase Contrast Objective 100x + Phase Contrast Slide 100x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2601-100
	Turret Phase Contrast Attachment Infinity Plan Phase Contrast Objective 10x20x40x100x, Turret Phase Contrast Condenser 5-Holes, Telescope 11x, Green Filter	○	○	A5C.2603-S
Fluorescence	Upgrade From A12.2601-C/CT Biological Microscope With: 5W LED Fluorescent Built-in Media Device, Single Band, China Filter B or G Ultraviolet Protection Barrier	●		A5F.2605-1
	Upgrade From A12.2601-C/CT Biological Microscope With: 5W LED Fluorescent Built-in Media Device, Double Band, China Filter B + G Ultraviolet Protection Barrier		●	A5F.2605-2
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	A55.2601-75
	C-Mount 1.0x, Focus Adjustable			A55.2601-10
	Upgrade From A12.2601-C/CT Fluorescence Microscope With:			A55.2610
Mirror	Reflecting Mirror & Holder	○	○	A56.2601
Attachment	Wire Winding Device	○	○	A50.2602-S
Package	Carton Size 970×340×440mm, 1 pc / Ctn			
Weight	Gross Weight: 22 kgs, Net Weight: 18 kgs			

Note: "●" In Table Is Standard outfits, "○" Is Optional Accessories

# A16.2603 Fluorescent Microscope

**OPTO-EDU**



Six Holes Fluorescent Turret



Six Holes Fluorescent Unit Can Hold Up To 5 Fluorescent Filter + Bright Field View  
 100W Mercury Fluorescent Light Source For Observe In Pathology, Clinical Lab Use  
 Large Head Eyepiece Tube Dia.30mm + Super Wide Field SWF10x/22mm Eyepiece  
 Rackless Large Mechanical Stag 182x140mm/77x52m With Double Slide Holder  
 Swing Out Condenser N.A. 0.9/0.13 + High Brightness 6V30W Halogen Koehler Illumination



Items	A16.2603 Fluorescent Microscope Specification	-B2	-T2	-B4	-T4	Cata. No.
Head	Seidentopf Binocular Head Inclined 30°, Rotatable 360°, Interpupillary Distance 48-76mm, Eyepiece Tube Dia.30mm	●	○	●	○	A53.2623-B
	Seidentopf Trinocular Head Inclined 30°, Rotatable 360°, Interpupillary Distance 48-76mm, Light Split Switch E100:P0/E20:P80, Eyepiece Tube Dia.30mm	○	●	○	●	A53.2623-T
Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint, Diopter Adjustable	●●	●●	●●	●●	A51.2621-1022
Nosepiece	Quintuple	●	●	●	●	A54.2610-N01

Infinity Plan Objective	PLAN 2.5X/0.07,W.D.=8.47mm	○	○	○	○	A52.2606-2.5
	PLAN 4X/0.10,W.D.=12.10mm	●	●	●	●	A52.2606-4
	PLAN 10X/0.25,,W.D.=4.64mm	●	●	●	●	A52.2606-10
	PLAN 20X/0.40(S),W.D.=2.41mm	●	●	●	●	A52.2606-20
	PLAN 40X/0.66(S),W.D.=0.65mm	●	●	●	●	A52.2606-40
	PLAN 60X/0.80(S),W.D.=0.33mm	○	○	○	○	A52.2606-60
	PLAN 100X/1.25(S,Oil),W.D.=0.12mm	●	●	●	●	A52.2606-100
	PLAN 100X/1.15(S,Water),W.D.=0.19mm	○	○	○	○	A52.2606-100W
Infinity Plan Semi-APO Fluorescent Objective	UplanFLN 4x, N.A.0.16, W.D.=17.151mm	○	○	○	○	A5F.2611-4
	UplanFLN 10x, N.A.0.30, W.D.=7.68mm	○	○	○	○	A5F.2611-10
	UplanFLN 20x, N.A.0.50, W.D.=1.96mm	○	○	○	○	A5F.2611-20
	UplanFLN 40x, N.A.0.75, W.D.=0.78mm	○	○	○	○	A5F.2611-40
	UplanFLN 100x(Oil), N.A.1.30, W.D.=0.15mm	○	○	○	○	A5F.2611-100
Working Stage	Rackless (Integrated) Mechanical Stage, Size 182x140mm, Travel Range 77x52mm, Double Slide Holder	●	●	●	●	A54.2601-S10
	Mechanical Stage Size 175 mmx145mm, Travel 76mmX52mm, Scale: 0.1mm, Double Slide Holder	○	○	○	○	A54.2601-S01
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 22mm, Fine Focusing Div. 0.002mm	●	●	●	●	
Condenser	Swing-out Condenser,N.A.0.9/0.13,Iris Diaphragm	●	●	●	●	A56.2614-07a
Illumination	Transmit Light 6V30W Halogen Koehler Illumination, Wide Voltage 100V~240V, Field Diaphragm	●	●	●	●	A56.2613-30W
Field Diaphragm	For Kohler Illumination	●	●	●	●	A56.2615-BK
Filter	Dia.45mm, Blue	●	●	●	●	A56.2616-45B
	Dia.45mm, Green	○	○	○	○	A56.2616-45G
	Dia.45mm, Yellow	○	○	○	○	A56.2616-45A
Dark Field	Dark Field Condenser, Dry, N.A.0.83-0.91, For 4x10x40x Objective	○	○	○	○	A5D.2610-BK
	Dark Field Condenser, Immersion, N.A.1.3, For 100x Objective					A5D.2610-BKW
Polarizing	Analyzer + Polarizer Set	○	○	○	○	A5P.2601-BK
Phase Contrast	Infinity Plan Phase Contrast Objective 10x + Phase Contrast Slide	○	○	○	○	A5C.2602-10
	10x + Phase Contrast Condenser + Telescope 11x + Green Filter					
	Infinity Plan Phase Contrast Objective 20x + Phase Contrast Slide	○	○	○	○	A5C.2602-20
	20x + Phase Contrast Condenser + Telescope 11x + Green Filter					
	Infinity Plan Phase Contrast Objective 40x + Phase Contrast Slide	○	○	○	○	A5C.2602-40
	40x + Phase Contrast Condenser + Telescope 11x + Green Filter					
Fluorescence	Infinity Plan Phase Contrast Objective 100x + Phase Contrast Slide	○	○	○	○	A5C.2602-100
	100x + Phase Contrast Condenser + Telescope 11x + Green Filter					
	Turret Phase Contrast Attachment					
Fluorescence	Infinity Plan Phase Contrast Objective 10x20x40x100x, Turret	○	○	○	○	A5C.2603-BK
	Phase Contrast Condenser 5-Holes, Telescope 11x, Green Filter					
Fluorescence	Upgrade From A12.2603-B/T Biological Microscope With B,G China Fluorescent Set 100W Mercury Lamp House 100W Mercury Power Box, Digital Disp. 6 Holes Disc Fluorescent Unit Ultraviolet Protection Barrier Centering Objective China 100W Mercury Lamp 2 pcs	●	●			A5F.2601-2
	Upgrade From A12.2603-B/T Biological Microscope With B,G,U,UV China Fluorescent Set 100W Mercury Lamp House 100W Mercury Power Box, Digital Disp. 6 Holes Disc Fluorescent Unit Ultraviolet Protection Barrier Centering Objective China 100W Mercury Lamp 2 pcs			●	●	A5F.2601-4
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	○	○	A55.2601-75
	C-Mount 1.0x, Focus Adjustable	○	○	○	○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm	○	○	○	○	A55.2610
Package	Carton Size 970x340x440mm, 1 pc / Ctn					
Weight	Gross Weight: 22 kgs, Net Weight: 18 kgs					
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories						



# A16.2603-L LED Fluorescent Microscope

**OPTO-EDU**



Six Holes Fluorescent Turret



Six Holes Fluorescent Unit Can Hold Up To 5 Fluorescent Filter + Bright Field View  
 5W LED Fluorescent Light Source For Observe In Pathology, Clinical Lab Use  
 Large Head Eyepiece Tube Dia.30mm + Super Wide Field SWF10x/22mm Eyepiece  
 Rackless Large Mechanical Stag 182x140mm/77x52m With Double Slide Holder  
 Swing Out Condenser N.A. 0.9/0.13 + High Brightness 6V30W Halogen Koehler Illumination



Items	A16.2603-L LED Fluorescent Microscope Specification	B2	T2	B4	T4	Cata. No.
Head	Seidentopf Binocular Head Inclined 30°,Rotatable 360°, Interpupillary Distance 48-76mm, Eyepiece Tube Dia.30mm	●	○	●	○	A53.2623-B
	Seidentopf Trinocular Head Inclined 30°,Rotatable 360°, Interpupillary Distance 48-76mm, Light Split Switch E100:P0/E20:P80, Eyepiece Tube Dia.30mm	○	●	○	●	A53.2623-T

Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint, Diopter Adjustable	●●	●●	●●	●●	A51.2621-1022
Nosepiece	Quintuple	●	●	●	●	A54.2610-N01
Infinity Plan Objective	PLAN 2.5X/0.07,W.D.=8.47mm	○	○	○	○	A52.2606-2.5
	PLAN 4X/0.10,W.D.=12.10mm	●	●	●	●	A52.2606-4
	PLAN 10X/0.25,,W.D.=4.64mm	●	●	●	●	A52.2606-10
	PLAN 20X/0.40(S),W.D.=2.41mm	●	●	●	●	A52.2606-20
	PLAN 40X/0.66(S),W.D.=0.65mm	●	●	●	●	A52.2606-40
	PLAN 60X/0.80(S),W.D.=0.33mm	○	○	○	○	A52.2606-60
	PLAN 100X/1.25(S,Oil),W.D.=0.12mm	●	●	●	●	A52.2606-100
	PLAN 100X/1.15(S,Water),W.D.=0.19mm	○	○	○	○	A52.2606-100W
Infinity Plan Semi-APO Fluorescent Objective	UplanFLN 4x, N.A.0.16, W.D.=17.151mm	○	○	○	○	A5F.2611-4
	UplanFLN 10x, N.A.0.30, W.D.=7.68mm	○	○	○	○	A5F.2611-10
	UplanFLN 20x, N.A.0.50, W.D.=1.96mm	○	○	○	○	A5F.2611-20
	UplanFLN 40x, N.A.0.75, W.D.=0.78mm	○	○	○	○	A5F.2611-40
	UplanFLN 100x(Oil), N.A.1.30, W.D.=0.15mm	○	○	○	○	A5F.2611-100
Working Stage	Rackless (Integrated) Mechanical Stage, Size 182x140mm, Travel Range 77x52mm, Double Slide Holder	●	●	●	●	A54.2601-S10
	Mechanical Stage Size 175 mmx145mm, Travel 76mmX52mm, Scale: 0.1mm, Double Slide Holder	○	○	○	○	A54.2601-S01
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 22mm, Fine Focusing Div. 0.002mm	●	●	●	●	
Condenser	Swing-out Condenser,N.A.0.9/0.13,Iris Diaphragm	●	●	●	●	A56.2614-07a
Illumination	Transmit Light 6V30W Halogen Koehler Illumination, Wide Voltage 100V~240V, Field Diaphragm	●	●	●	●	A56.2650-30W
Field Diaphragm	For Kohler Illumnation	●	●	●	●	A56.2615-BK
Filter	Dia.45mm, Blue	●	●	●	●	A56.2616-45B
	Dia.45mm, Green	○	○	○	○	A56.2616-45G
	Dia.45mm, Yellow	○	○	○	○	A56.2616-45A
Dark Field	Dark Field Condenser, Dry, N.A.0.83-0.91, For 4x10x40x Objective	○	○	○	○	A5D.2610-BK
	Dark Field Condenser, Immersion, N.A.1.3, For 100x Objective					A5D.2610-BKW
Polarizing	Analyzer + Polarizer Set	○	○	○	○	A5P.2601-BK
Phase Contrast	Infinity Plan Phase Contrast Objective 10x + Phase Contrast Slide 10x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	A5C.2602-10
	Infinity Plan Phase Contrast Objective 20x + Phase Contrast Slide 20x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	A5C.2602-20
	Infinity Plan Phase Contrast Objective 40x + Phase Contrast Slide 40x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	A5C.2602-40
	Infinity Plan Phase Contrast Objective 100x + Phase Contrast Slide 100x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	○	○	A5C.2602-100
	Turret Phase Contrast Attachment Infinity Plan Phase Contrast Objective 10x20x40x100x, Turret Phase Contrast Condenser 5-Holes, Telescope 11x, Green Filter	○	○	○	○	A5C.2603-BK
Fluorescence	Upgrade From A12.2603-B/T Biological Microscope With B,G China Fluorescent Set 6 Holes Disc Fluorescent Unit 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier	●	●			A5F.2602-2
	Upgrade From A12.2603-B/T Biological Microscope With B,G,U,UV China Fluorescent Set 6 Holes Disc Fluorescent Unit 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier			●	●	A5F.2602-4
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	○	○	A55.2601-75
	C-Mount 1.0x, Focus Adjustable	○	○	○	○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm	○	○	○	○	A55.2610
Package	Carton Size 970x340x440mm, 1 pc / Ctn					
Weight	Gross Weight: 22 kgs, Net Weight: 18 kgs					

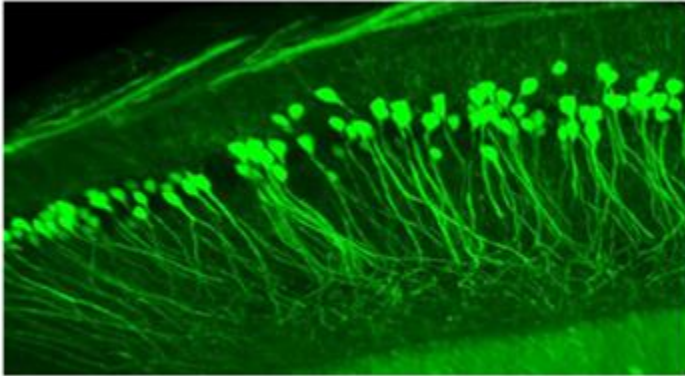
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories



# A16.2603-NL

## LED Fluorescent Microscope

OPTO-EDU



Built-in All-in-One Fluorescent Media Unit 5W LED With 1 or 2 Filters  
Semi-APO Infinity Plan Fluorescent Objective Available For High Quality Image  
Large Head Eyepiece Tube Dia.30mm + Super Wide Field SWF10x/22mm Eyepiece  
Rackless Large Mechanical Stag 182x140mm/77x52m With Double Slide Holder  
Swing Out Condenser N.A. 0.9/0.13 + High Brightness 6V30W Halogen Koehler Illumination

- **A5F.2605** Newly Designed 2020 All-in-One Built-in Media Fluorescent Device For 2 Bands





Items	A16.2603-NL LED Fluorescent Microscope Specification	-1	-2	Cata. No.
Head	Seidentopf Trinocular Head Inclined 30°, Rotatable 360°, Interpupillary Distance 48-76mm, Light Split Switch E100:P0/E20:P80, Eyepiece Tube Dia.30mm	●	●	A53.2623-T
Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint, Diopter Adjustable	●●	●●	A51.2621-1022
Nosepiece	Quintuple	●	●	A54.2610-N01
Infinity Plan Objective	PLAN 2.5X/0.07, W.D.=8.47mm	○	○	A52.2606-2.5
	PLAN 4X/0.10, W.D.=12.10mm	●	●	A52.2606-4
	PLAN 10X/0.25, W.D.=4.64mm	●	●	A52.2606-10
	PLAN 20X/0.40(S), W.D.=2.41mm	●	●	A52.2606-20
	PLAN 40X/0.66(S), W.D.=0.65mm	●	●	A52.2606-40
	PLAN 60X/0.80(S), W.D.=0.33mm	○	○	A52.2606-60
	PLAN 100X/1.25(S,Oil), W.D.=0.12mm	●	●	A52.2606-100
	PLAN 100X/1.15(S,Water), W.D.=0.19mm	○	○	A52.2606-100W
Infinity Plan Semi-APO Fluorescent Objective	UplanFLN 4x, N.A.0.16, W.D.=17.151mm	○	○	A5F.2611-4
	UplanFLN 10x, N.A.0.30, W.D.=7.68mm	○	○	A5F.2611-10
	UplanFLN 20x, N.A.0.50, W.D.=1.96mm	○	○	A5F.2611-20
	UplanFLN 40x, N.A.0.75, W.D.=0.78mm	○	○	A5F.2611-40
	UplanFLN 100x(Oil), N.A.1.30, W.D.=0.15mm	○	○	A5F.2611-100
Working Stage	Rackless (Integrated) Mechanical Stage, Size 182×140mm, Travel Range 77×52mm, Double Slide Holder	●	●	A54.2601-S10
	Mechanical Stage Size 175 mm×145mm, Travel 76mm×52mm, Scale: 0.1mm, Double Slide Holder	○	○	A54.2601-S01
Focusing	Coaxial Coarse & Fine Focusing, Coarse Focusing Travel Range: 22mm, Fine Focusing Div. 0.002mm	●	●	
Condenser	Swing-out Condenser, N.A.0.9/0.13, Iris Diaphragm	●	●	A56.2614-07a
Illumination	Transmit Light 6V30W Halogen Koehler Illumination, Wide Voltage 100V~240V, Field Diaphragm	●	●	A56.2650-30W
Field Diaphragm	For Kohler Illumination	●	●	A56.2615-BK
Filter	Dia.45mm, Blue	●	●	A56.2616-45B
	Dia.45mm, Green	○	○	A56.2616-45G
	Dia.45mm, Yellow	○	○	A56.2616-45A
Dark Field	Dark Field Condenser, Dry, N.A.0.83-0.91, For 4x10x40x Objective	○	○	A5D.2610-BK
	Dark Field Condenser, Immersion, N.A.1.3, For 100x Objective			A5D.2610-BKW
Polarizing	Analyzer + Polarizer Set	○	○	A5P.2601-BK
Phase Contrast	Infinity Plan Phase Contrast Objective 10x + Phase Contrast Slide 10x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2602-10
	Infinity Plan Phase Contrast Objective 20x + Phase Contrast Slide 20x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2602-20
	Infinity Plan Phase Contrast Objective 40x + Phase Contrast Slide 40x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2602-40
	Infinity Plan Phase Contrast Objective 100x + Phase Contrast Slide 100x + Phase Contrast Condenser + Telescope 11x + Green Filter	○	○	A5C.2602-100
	Turret Phase Contrast Attachment Infinity Plan Phase Contrast Objective 10x20x40x100x, Turret Phase Contrast Condenser 5-Holes, Telescope 11x, Green Filter	○	○	A5C.2603-BK
Fluorescence	Upgrade From A12.2603-B/T Biological Microscope With 5W LED Fluorescent Built-in Media Device, Single Band, China Filter B or G Ultraviolet Protection Barrier	●		A5F.2605-1
	Upgrade From A12.2603-B/T Biological Microscope With 5W LED Fluorescent Built-in Media Device, Double Band, China Filter B + G Ultraviolet Protection Barrier		●	A5F.2605-2
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	A55.2601-75
	C-Mount 1.0x, Focus Adjustable	○	○	A55.2601-10
	Digital Eyepiece Camera Adapter, Dia. 23.2mm/25mm	○	○	A55.2610
Package	Carton Size 970×340×440mm, 1 pc / Ctn			
Weight	Gross Weight: 22 kgs, Net Weight: 18 kgs			
Note: "●" In Table Is Standard outfits, "○" Is Optional Accessories				

# A16.2614-L

## Inverted LED Fluorescent Microscope

**OPTO-EDU**



3 Holes Fluorescent Slide + 5W LED Fluorescent Illumination  
Seidentopf Trinocular Head, Light Split Switch E100:P0 / E20:P80  
LWD Infinity Plan Objectives Bright Field & Phase Contrast Observation Supported  
LWD Condenser N.A.0.3 Working Distance 72mm, Up To 195mm Without Condenser  
Standard Halogen 6V30W Koehler Illumination, 5W LED Optional For Choice



A54.2601-D4  
Mechanical Stage Size 210x241mm  
Round Slide Size  $\Phi$ 110mm



A54.2606-54  
Culture Dish Holder 54mm



A54.2606-65 & A54.2606-35  
Culture Dish Holder 65mm  
& Culture Dish Holder 35mm  
(Optional)



72mm Working Distance, Can Place  
Higher Observed Sample Containers

Items	A16.2614-L Inverted LED Fluorescent Microscope Specification	-2	-4	Cata. No.
Head	Seidentopf Trinocular Head Inclined 45°, Interpupillary Distance 48~76mm, Light Split Switch E100:P0 / E20:P80	●	●	A53.2643
Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint,, Diopter Adjustable	●●	●●	A51.2621-1022
	WF15X/16mm, Dia.30mm, High Eyepoint, Diopter Adjustable	○○	○○	A51.2621-1516
	WF20X/12mm, Dia.30mm, High Eyepoint, Diopter Adjustable	○○	○○	A51.2621-2012
Nosepiece	Quintuple	●	●	A54.2610-N925
LWD Infinity Plan Objectives	LPL 4x/0.11, W.D.=12.1mm	○	○	A52.2609-4
	LPL10x/0.25, W.D.=8.3mm	●	●	A52.2609-10
	LPL 20x/0.40, W.D.=7.2mm	●	●	A52.2609-20
	LPL 40x/0.60, W.D.=3.4mm	●	●	A52.2609-40
LWD Infinity Plan Phase Contrast Objectives	LPL Ph P 4x/0.10, W.D.=9.2mm	○	○	A5C.2630-4
	LPL Ph P 10x/0.25, W.D.=8.3mm	○	○	A5C.2630-10
	LPL Ph P 20x/0.40, W.D.=7.2mm	●	●	A5C.2630-20
	LPL Ph P 40x/0.60, W.D.=3.4mm	○	○	A5C.2630-40
Phase Contrast	Centering Telescope 11x	○	○	A5C.2610
	Annular Spot 4x	○	○	A5C.2611-4
	Annular Spot 20x/ 40x	●	●	A5C.2611-10
	Annular Spot 10x	●	●	A5C.2611-20/40
Working Stage	Mechanical Stage Size 210x241mm, Round Slide Size Φ110mm	●	●	A54.2601-D4
	Attached Mechanical Stage, Available For 96 Holes Plate, Moving Range 128x80mm	○	○	A54.2605
	Culture Dish Holder 65mm	○	○	A54.2606-65
	Culture Dish Holder 54mm	●	●	A54.2606-54
	Culture Dish Holder 35mm	○	○	A54.2606-35
	Holder For Blood Cell Counter	○	○	A54.2606-BC
Condenser	Long Working Distance, Quickly Detachable, N.A.0.3, Working Distance 72mm (With Condenser), 195mm (Without Condenser).	●	●	A56.2614-D4
Illumination	Koehler Illumination Halogen 6V/30W, Input Voltage 100V~240V	●	●	A56.2613-30W
	Koehler Illumination 5W LED, Input Voltage 100V~240V	○	○	A56.2651-5W
Power	ECO, Auto Power Off System. Power Off Automatically Upon User Leaving 10 Minutes, Power On Automatically Upon User Approaching Detected, This Function Can Be Shut Down Manually	○	○	A56.2660
Filter	Blue, Dia.34mm	●	●	A56.2616-34B
	Green, Dia.34mm	●	●	A56.2616-34G
	Amber, Dia.34mm	○	○	A56.2616-34A
	Grey, Dia.34mm	○	○	A56.2616-34N
Adapter	C-Mount 0.5x, Focus Adjustable	○	○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○	○	A55.2601-75
	C-Mount1.0x, Focus Adjustable	○	○	A55.2601-10
Epi Fluorescence Illumination	Upgrade From A14.2603 Inverted Microscope With B,G China Fluorescent Filter, 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier Fluorescent Slide Unit 3 Holes, With Filter Diaphragm, Center Adjustable 5W LED B,G Lamp Each 1 pc	●	○	A5F.2604-2
	Upgrade From A14.2603 Inverted Microscope With B,G,V,VU China Fluorescent Filter, 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier Fluorescent Slide Unit 3 Holes, With Filter Diaphragm, Center Adjustable 5W LED B,G,V,VU Lamp Each 1 pc	○	●	A5F.2604-4
Package	Packing Size: 660mmx590mmx325mm Fluorescence Carton Size 520x470x235mm			
Weight	Gross Weight: 18 kgs, Net Weight: 13.5 kgs			

Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories.



# A16.2615-L

## Inverted LED Fluorescent Microscope

**OPTO-EDU**



3 Holes Fluorescent Slide + 5W LED Fluorescent Illumination  
 ECO Automatic Power Off Upon User Leaving 10 Minutes & Power On Upon User Back  
 Dual Photo & Video Channel Support Eyepiece / Digital Camera / SLR Camera View At Same Time  
 LWD Infinity Plan Objectives Bright Field & Phase Contrast Observation Supported  
 4 Holes Disc Phase Contrast Condenser + Halogen 12V50W Koehler Illumination



12V/50W Kohler Illumination Makes The Field More Even And Brighter



4-hole Rotating Disc Phase Contrast Condenser For Standard To Change Bright Field And Phase Contrast Fast

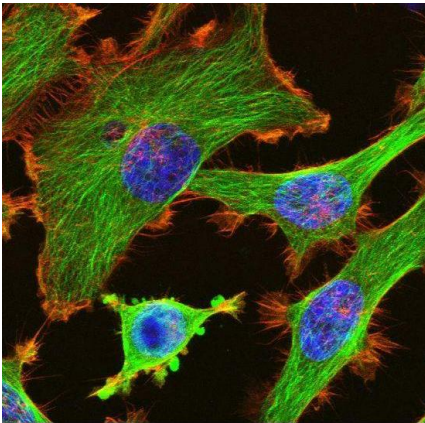
Items	A16.2615-L Inverted LED Fluorescent Microscope Specification	-2	-4	Cata. No.
Head	Seidentopf Trinocular Head Inclined 45°, Interpupillary Distance 48~76mm, , Light Split Switch E100:P0 / E20:P80  Dual Photo & Video Channel Support Eyepiece View / Digital Camera/SLR Camera Take Picture & Record Video At Same Time: --Eyepiece View Has 100% Or 20% Light Switchable --Digital Camera Port Has 0% Or 80% Light Switchable --Photography Port 100% Light For SLR Camera (Standard Outfit Including SLR Camera Adapter 1pc)		• •	A53.2643

Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint,, Diopter Adjustable	●●●●	A51.2621-1022
	WF15X/16mm, Dia.30mm, High Eyepoint, Diopter Adjustable	○○○○	A51.2621-1516
	WF20X/12mm, Dia.30mm, High Eyepoint, Diopter Adjustable	○○○○	A51.2621-2012
Nosepiece	Quintuple	●●	A54.2610-N925
LWD Infinity Plan Objectives	LPL 4x/0.11, W.D.=12.1mm	●●	A52.2609-4
	LPL10x/0.25, W.D.=8.3mm	○○	A52.2609-10
	LPL 20x/0.40, W.D.=7.2mm	○○	A52.2609-20
	LPL 40x/0.60, W.D.=3.4mm	○○	A52.2609-40
LWD Infinity Plan Phase Contrast Objectives	LPL Ph P 4x/0.10, W.D.=9.2mm	○○	A5C.2630-4
	LPL Ph P 10x/0.25, W.D.=8.3mm	●●	A5C.2630-10
	LPL Ph P 20x/0.40, W.D.=7.2mm	●●	A5C.2630-20
	LPL Ph P 40x/0.60, W.D.=3.4mm	●●	A5C.2630-40
Phase Contrast	4 Holes Rotating Disc Phase Contrast Condenser N.A.0.4, W.D. 45mm, Up/Down Adjustable	●●	A56.2612
	Centering Telescope 11x	●●	A5C.2610
	Annular Spot 4x	○○	A5C.2611-4
	Annular Spot 20x/ 40x	●●	A5C.2611-10
	Annular Spot 10x	●●	A5C.2611-20/40
Working Stage	Mechanical Stage Size 210x241mm, Round Slide Size Φ110mm	●●	A54.2601-D4
	Attached Mechanical Stage, Available For 96 Holes Plate, Moving Range 128x80mm	●●	A54.2605
	Culture Dish Holder 65mm	○○	A54.2606-65
	Culture Dish Holder 54mm	●●	A54.2606-54
	Culture Dish Holder 35mm	○○	A54.2606-35
	Holder For Blood Cell Counter	○○	A54.2606-BC
Illumination	Koehler Illumination Halogen 12V/50W, Input Voltage 100V~240V	●●	A56.2650-50W
	Koehler Illumination 5W LED, Input Voltage 100V~240V	○○	A56.2651-5W
Power	ECO, Auto Power Off Automatically Upon User Leaving 10 Minutes, System. Power On Automatically Upon User Approaching Detected, This Function Can Be Shut Down Manually	●●	A56.2660
Filter	Blue, Dia.34mm	●●	A56.2616-34B
	Green, Dia.34mm	●●	A56.2616-34G
	Amber, Dia.34mm	○○	A56.2616-34A
	Grey, Dia.34mm	○○	A56.2616-34N
Adapter	Photo Adapter With 1.7x Photo Eyepiece,100% Light For Camera Port, For Canon SLR Digital Camera	●●	A55.2622-BC17
	Photo Adapter With 1.7x Photo Eyepiece,100% Light For Camera Port, For Nikon SLR Digital Camera	○○	A55.2622-BN17
	Photo Adapter With 2.5x Photo Eyepiece,100% Light For Camera Port, For Canon SLR Digital Camera With 1" CCD Sensor	○○	A55.2622-BC25
	Photo Adapter With 2.5x Photo Eyepiece,100% Light For Camera Port, For Nikon SLR Digital Camera With 1" CCD Sensor	○○	A55.2622-BN25
	C-Mount 0.5x, Focus Adjustable	○○	A55.2601-05
	C-Mount 0.75x, Focus Adjustable	○○	A55.2601-75
	C-Mount1.0x, Focus Adjustable	○○	A55.2601-10
Fluorescence	Upgrade From A14.2605 Inverted Microscope With B,G China Fluorescent Filter, 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier Fluorescent Slide Unit 3 Holes, With Filter Diaphragm, Center Adjustable 5W LED B,G Lamp Each 1 pc	●○	A5F.2604-2
	Upgrade From A14.2605 Inverted Microscope With B,G,V,VU China Fluorescent Filter, 5W LED Lamp House 5W LED Power Box Ultraviolet Protection Barrier Fluorescent Slide Unit 3 Holes, With Filter Diaphragm, Center Adjustable 5W LED B,G,V,VU Lamp Each 1 pc	○●	A5F.2604-4
Package	Packing Size: 660mmx590mmx325mm Fluorescence Carton Size 520x470x235mm		
Weight	Gross Weight: 18 kgs, Net Weight: 13.5 kgs		
Note: "●"In Table Is Standard outfits, "○" Is Optional Accessories.			

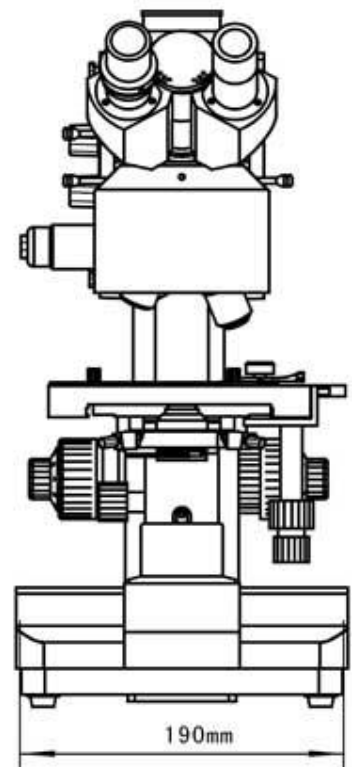
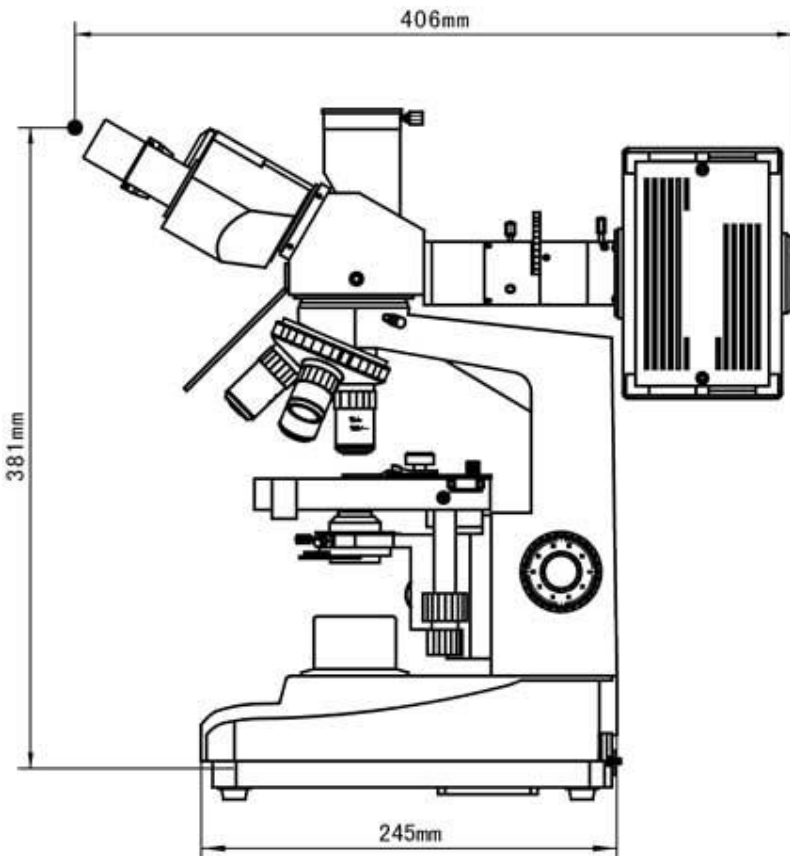
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## Flourescent Microscope

**OPTO-EDU**



Total Magnification 40x~1600x Achromatic Optical System  
Fluorescent Objective 25x, Epi-Fluorescence Mercury Lamp House 100W Light Source  
Double Layer Mechanical Stage, Size 135x125mm, Move Range 75x35mm  
Transmit Light 6V 20W Halogen Lamp, Adjustable Brightness  
Fluorescence Filter B,G,U,UV Exciton Wavelength Optional





# Product Specification

## A16.0204 Reflected Fluorescence Microscope

A16.0204 Reflected Fluorescence Microscope Model Is Used For Fluorescence Microscopy And Transmitted Bright Field Microscopy Observation. It Is The Ideal Instrument In Sediment In Sedimentary Rock, Inspection Of Impurity Of Semiconductor, Environmental Protection And Microchemistry Etc. It Is The Ideal Instrument In Biology, Cytology, Oncology, Genetics, Immunology Etc. It Also Can Be Used In Scientific Research, Universities, Medical Treatment, Epidemic Prevention Etc.

--With Wide Field Eyepieces And Achromatic Objectives, The Field Of View Is Widely And Clear

--Coaxial Coarse/Fine Focus System, With Tensional Adjustable And Up Stop, Minimum Division Of Fine Focusing 0.002mm

--6Volt 20Watt Halogen Lamp With Brightness Control

Eyepiece	Wide Field WF10x/18mm
Objective	Achromatic 4x/0.10, 10x/0.25, 100x/1.25(Spring, Oil)
	Fluorescence 25x/0.65
Head	Trinocular, Inclination 30°, Rotatable 360°
Focus System	Coaxial Coarse & Fine Focus System, With Tensional Adjustable And Up Stop, Minimum Division of Fine Focusing 0.002mm
Nosepiece	Quadruple, Backward Ball Bearing Inner Locating
Stage	Double Layer Mechanical Stage, Size 135x125mm, Move Range 75x35mm
Condenser	Abbe Condenser N.A.1.25 Rack & Pinion Height Adjustable
Filter	Frosted Filter
	Blue Filter
Collector	For Halogen Lamp
Light Source	6V 20W Halogen Lamp, Adjustable Brightness
Reflected Epi-Fluorescence	Mercury Lamp House 100W DC
	Power Supply Unit AC 110V or 220V
	Fluorescence Filter B Exciton Wavelength 450~490nm
	Fluorescence Filter G Exciton Wavelength 495~555nm

## A16.0204 Optional Accessories

Eyepiece	Wide Field WF16x/11mm	A51.0203-16A
	Dividing 10x/20mm, 0.1mm/Div	A51.0205-G10
Objectives	Fluorescence Objectives FL 40x/1.00 (Spring, Glycerin)	A5F.0205-40
	Fluorescence Objectives FL 100x/1.25 (Spring, Glycerin)	A5F.0205-100
Nosepiece	Quintuple (Backward Ball Bearing Inner Locating)	A54.0203-1
Filter	Green	A56.0209-2
	Yellow	A56.0209-3
Fluorescence	Power Supply Unit AC 110-220V Wide Voltage, For 100W Fluorescence, With Constant Power And Calculagraph	A5F.0204-3
Reflected Fluorescence	Fluorescence Filter UV Exciton Wavelength 320~380nm	A5F.0201-UV
	Fluorescence Filter V Exciton Wavelength 380~415nm	A5F.0201-V
Phase Contrast Unit	Eyepiece: Centering Telescope	A5C.0204-1
	Phase Contrast Plan Achromatic Objective 10x/0.25 PHP	A5C.0211-10
	Phase Contrast Plan Achromatic Objective 20x/0.40 PHP	A5C.0211-20
	Phase Contrast Plan Achromatic Objective 40x/0.65 PHP(Spring)	A5C.0211-40
	Phase Contrast Plan Achromatic Objective 100x/1.25 PHP(Spring, Oil)	A5C.0211-100
	(PH-I) Turnplate Phase Contrast Condenser	A5C.0202-1
	(PH-II) Turnplate Phase Contrast Condenser	A5C.0202-4
	Flashboard Phase Contrast Condenser	A5C.0202-2
Pullboard Phase Contrast Condenser	A5C.0202-3	
CCD Adapter	0.4x C-Mount	A55.0202-1
	1.0x C-Mount	A55.0202-2
	0.5x C-Mount With Dividing 0.1mm/Div	A55.0202-3
	0.5x C-Mount	A55.0202-4
DC Adapter	Digital SLR Camera Adapter for Canon EF	A55.0204-1
Photo Adapter	2.5X/4X Change over photograph adapter with 10X viewing eyepiece	A55.0201-1
	4X Focusing photograph adapter	A55.0201-2
	MD Adapter	A55.0201-3
	PK Adapter	A55.0201-4

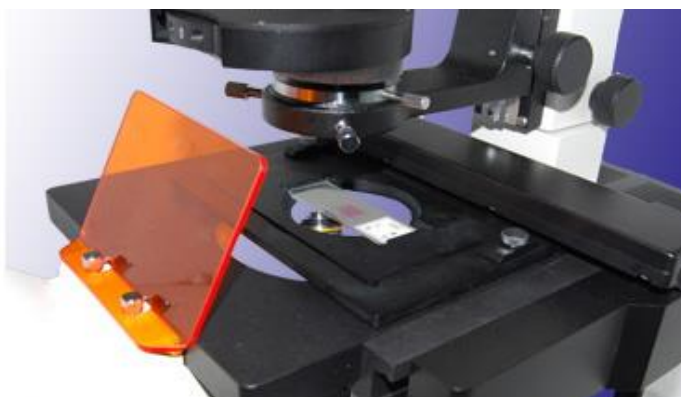
# A16.0206

## Inverted Flourescent Microscope, Phase Contrast

**OPTO-EDU**



Binocular Head, Side Photo/Video Port On Base, With 100% Light Pass  
Infinity Plan Achromatic Phase Contrast Objective 10x,20x,40x  
Epi-Fluorescent Illumination 100W DC Mercury Lamp  
Fluorescent Filter UV+V, B+G Groups Switchable  
Fixed Stage Overall Size 227x208mm, With Mechanical Moving Device, Moving Range 77x114mm



**Epi-Fluorescent Illumination System**  
Power Supply Unit, 110V or 230V Optional, 100W DC Mercury Lamp, Filter Group, UV+V,

# Product Specification

## A16.0206 Inverted Fluorescent Microscope, Phase Contrast

Head	Binocular, Inclination 45 Degree Interpapillary Distance 53~75mm.				
Eyepiece	WF10x/22mm				
	Centering Telescope				
Objective	<b>Infinity Plan Achromatic Objective</b> PLL 10x/0.25, WD 4.3mm, Cover Glass 1.2mm PLL 20x/0.40, WD 8.0mm, Cover Glass 1.2mm PLL 40x/0.60, WD 3.5mm, Cover Glass 1.2mm				
	<b>Infinity Plan Achromatic Phase Contrast Objective</b> PLL10x/0.25 PHP2, WD 4.3mm, Cover Glass 1.2mm PLL20x/0.40 PHP2, WD 8.0mm, Cover Glass 1.2mm. PLL40x/0.60 PHP2, WD 3.5mm, Cover Glass 1.2mm				
Epi-Fluorescent Illumination System	Power Supply Unit, 110V or 230V Optional				
	100W DC Mercury Lamp				
	<b>Fluorescent Filters</b>				
		<b>Group</b>	<b>Type</b>	<b>Excitation Wavelength</b>	<b>Emitted Wavelength</b>
		UV+V	Ultraviolet (UV)	320~380nm	435nm
	Violet light (V)		380~415nm	475nm	
	B+G	Blue light (B)	450~490nm	515nm	
		Green light (G)	495~555nm	595nm	
Focus	Coaxial Coarse & Fine Focus, With Tension Adjustable And Up Stop, Minimum Division of Fine Focusing 2um				
Nosepiece	Quintuple				
Stage	Fixed Stage Overall Size 227x208mm				
	Glass Round Stage Size Dia.118mm				
	Mechanical Moving Device, Moving Range 77x114mm				
	Culture Dish Holder: 86x129.5mm, For Circular Culture Dish Dia.7.5mm 34x77.5mm, For Circular Culture Dish Dia.68.5mm 57x82mm, For Circular Culture Dish Dia.60.0mm				
Transmit Illumination	Turnplate Phase Contrast Condenser, Working Distance 55mm				
	6V30W Halogen, Brightness Adjustable				
	Frosted Glass, Blue Filter, Green Filter				
Video Port	Side Photo/Video Port On Base, With 100% Light Pass				
<b>Optional Accessory</b>				<b>Item No.</b>	
Eyepiece	Recital Eyepiece WF10x/22mm, 0.1mm / Div.			A51.0205-G10B	
Objective	Infinity Plan Achromatic Objective PL5X/0.12 W.D.26.1			A52.0206-4	
Nosepiece	Sextuple (Backward Ball Bearing Inner Locating)			A54.0204	
CCD Adapter	0.4x			A55.0202-01	
	0.5x			A55.0202-04	
	1.0x			A55.0202-02	
	0.5x With Dividing 0.1mm/Div.			A55.0202-03	
Photo Adapter	2.5x/4x Change Over Photograph Attachment With 10x Photo Eyepiece			A55.0201-01	
	4x Focusing Photograph Attachment			A55.0201-02	
	MD Adapter			A55.0201-03	
	PK Adapter			A55.0201-04	
	Digital Camera Adapter For Canon EF digital SLR Camera Adapter			A55.0204-02	



# A16.0207

## LED Fluorescent Microscope

**OPTO-EDU**



Trinocular, Inclination 30°, Rotatable 360°  
 Double Layer Mechanical Stage, Size 210x140mm, Moving Range 75x50mm  
 5W High Brightness LED Illumination, Brightness Adjustable  
 Transmit 3W High Brightness White LED, Brightness Adjustable  
 Collector For Illumination With LED Lamp (With Filed Diaphragm)

A16.0207 LED Fluorescent Microscope		-2	-4	Cata. No.
Head	Trinocular, Inclination 30°, Rotatable 360°, Interpapillary 53~75mm, Left Side Eyepiece Tube Diopter Adjustable $\pm 5^\circ$ , Switch E100:P0/E0:P100	●	●	
Eyepiece	WF10x/22mm	●●	●●	
	Dividing eyepiece(field number: $\mu$ 22mm) 0.10mm/Div	○	○	A51.0205-G10B
Infinity Plan Achromatic Objective	PL4X/0.10 WD19.8mm	●	●	
	PL10X/0.25 WD5.00mm	●	●	
	PLFL40X/0.85 WD:0.42 mm(No magnification spherochromatic aberration )	●	●	
	PL60X/0.80 WD0.46mm	○	○	
	PL100X/1.25 WD0.36mm	●	●	
Nosepiece	Quintuple(Backward ball bearing inner locating)	●	●	
Working Stage	Double Layer Mechanical Stage, Size 210x140mm, Moving Range 75x50mm	●	●	
Focusing	Coaxial Coarse & Ffine Focus System, With Tensional Adjustable And Up Stop, Fine Focusing Minimum Division 2 $\mu$ m	●	●	
Epi-Fluorescent Illumination	5W High Brightness LED. Enable Selecting Monochromatic or Bichromatic LED for Light Source, Every Monochromatic LED Wave Band	●	●	
	Blue( 410nm~490nm)	●	●	
	Green (475nm~550nm)	●	●	
	UV (320nm~415nm)		●	
	V (380nm~415nm)		●	
Transmit Illumination	3W High Brightness White LED, Brightness Adjustable	●	●	
	Abbe Condenser N.A.=1.25, Rack & Pinion Up/Down Adjustable	●	●	
	Blue Filter And Ground Glass	●	●	
	Collector For Illumination With LED Lamp (With Filed Diaphragm)	●	●	
Filter	Green Filter	○	○	A56.0209-02
	Yellow Filter	○	○	A56.0209-03
Adapter	0.5x C-Mount	○	○	A55.0202-4
	1.0x C-Mount	○	○	A55.0202-2
	0.5x C-Mount With Dividing 0.1mm/Div	○	○	A55.0202-3
	Adapter For CANON EF Digital SLR Camera	○	○	A55.0204-01

Remark: '●' Means Standard Outfit, '○' Means Optional

# A16.0208

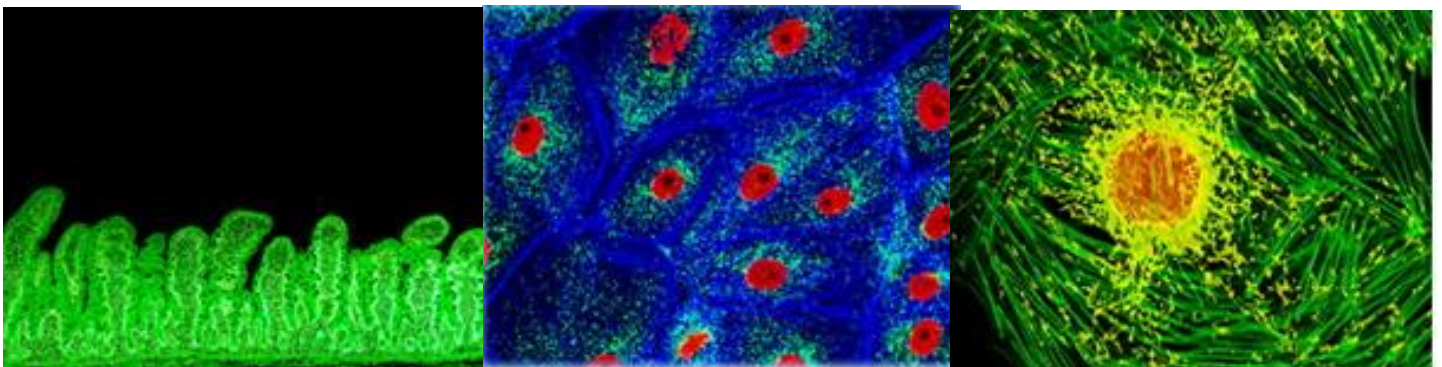
## LED Fluorescent Microscope, For Phthisis Checking

OPTO-EDU



360° Rotatable Head Adaptor For Easy Viewing Height Adjustable

Trinocular Head, 30° Inclined, Interpupillary Distance 55~75mm  
Infinity Plan Achromatic Fluorescent Objective 10x,20x,40x Available  
5W LED High Brightness Epi-fluorescent Illumination With B,G,UV,V Filter  
Quintuple, Center Adjustable, Backward Ball Bearing Inner Locating  
3W LED Transmit Illumination , Adjustable Brightness, With Collector For LED





# Product Specification

Specification	A16.0208 LED Fluorescent Microscope	-2	-4	-PH	Cata.No.
Head	Trinocular Head, 30° Inclined, Interpapillary Distance 55~75mm, Left Eyepiece Tube Diopter Adjustable +/-5°, Switch E100:P0/E0:P100, 100% Light Pass To Photo Tube	●	●	●	
Eyepiece	Wide Field WF10x/22mm	●	●	●	A51.0202-1022
	Dividing Eyepiece 10x/22mm, 0.10mm/Div	○	○	○	A51.0205-G10B
Nosepiece	Quintuple, Center Adjustable, Backward Ball Bearing Inner Locating	●	●	●	
Objective	Infinity Plan Achromatic Objective PL 4x/0.10	●	●	○	
	Infinity Plan Achromatic Objective PL 10x/0.25	●	●	●	
	Infinity Plan Achromatic Objective PL 40x/0.65	○	○	●	
	Infinity Plan Achromatic Objective PL 60x/0.80	○	○	●	
	Infinity Plan Achromatic Objective PL 100x/1.25 (Spring, Oil)	●	●	●	
	Infinity Plan Achromatic Fluorescent Objective PL FL10x/0.35 (Spring)	○	○	○	
	Infinity Plan Achromatic Fluorescent Objective PL FL20x/0.65 (Spring)	○	○	○	
	Infinity Plan Achromatic Fluorescent Objective PL FL40x/0.85 (Spring)	●	●	○	
Working Stage	Reckless Double Layer Mechanical Stage 180x150mm, Moving Range 75x50mm	●	●	●	
Focus System	Coaxial Coarse & Fine Focus, With Tension Adjustable And Up Stop, Fine Focusing Minimum Division 0.002mm	●	●	●	
Condenser	Abbe N.A.1.25, Rack & Pinion Height Adjustable, With Iris Diaphragm, With Blue Filter	●	●	●	
Light Source	3W LED Transmit Illumination , Adjustable Brightness, With Collector For LED	●	●	●	
Fluorescence	5W LED High Brightness Epi-fluorescent Illumination, Modular Design	●	●	●	
	B+G Fluorescent Filter Group	●			
	V+UV Fluorescent Filter Group		●		
	Auramine Filter Set, EX:445/50, DM:490, EM:495LP, For <b>Phthisis Checking</b>			●	
	Fluorescent Filter Set For CFP , FITC , CY3 , DAP And Etc.	○	○	○	
Power Supply	External Power Adapter, Input AC 80-250V, Output DC12V, Supply Power To Both Transmit & Fluorescent LED Light	●	●	●	
	Rechargeable Battery Pack, Large Capacity 60Wh Support 8 Hours Working Time For Transmit or Fluorescent LED Light Source	○	○	○	
CCD Adapter	0.4x	○	○	○	A55.0202-01
	0.5x	○	○	○	A55.0202-04
	1.0x	○	○	○	A55.0202-02
	0.5x With Dividing 0.1mm/Div	○	○	○	A55.0202-03
Photo Adapter	2.5x/4x Change Over Photograph Attachment With 10x Photo Eyepiece	○	○	○	A55.0201-01
	4x Focusing Photograph Attachment	○	○	○	A55.0201-02
	MD Adapter	○	○	○	A55.0201-03
	PK Adapter	○	○	○	A55.0201-04
	Digital Camera Adapter For Canon EF digital SLR Camera Adapter	○	○	○	A55.0204-02



# A16.0901

Inverted Fluorescence Microscope, Critical Illumination, Semi-APO, Phase Contrast, B,G

OPTO-EDU



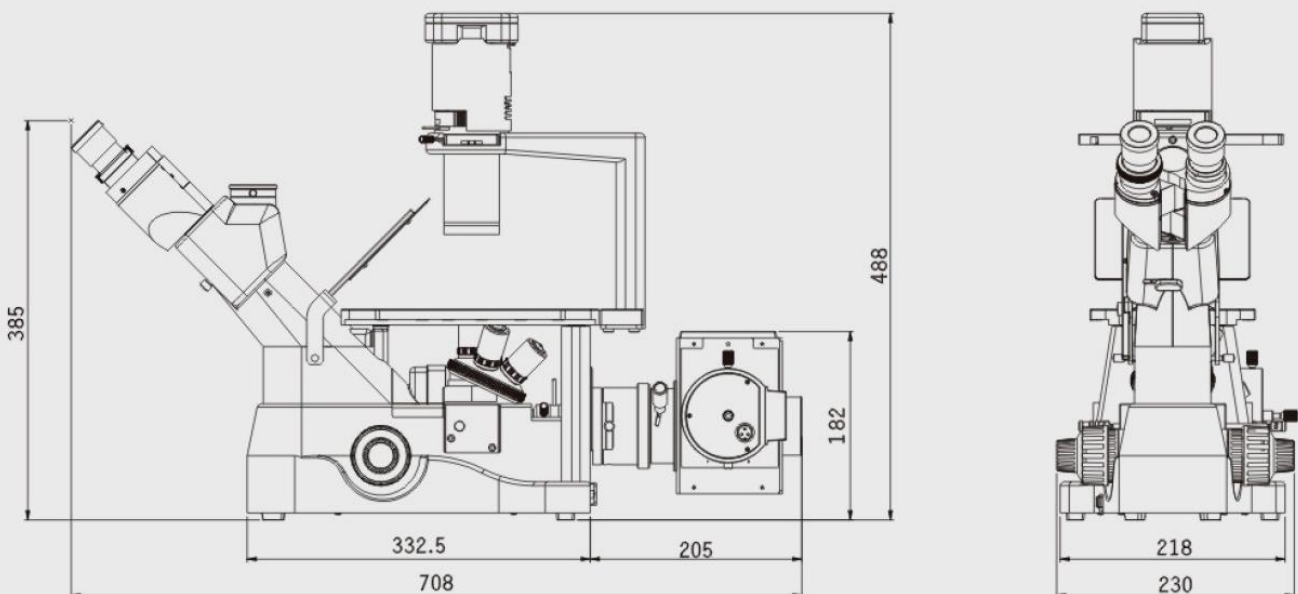
Trinocular Head , Gemel Viewing Head, 45 Degree Inclined, Interpupillary Distance 54-75mm, Splitting Ratio 100:0 or 0:100

LWD Infinity Plan Semi-Apochromatic Objectives Optional

LWD N.A.0.3 Kohler Condenser, With Phase Contrast Slide Slot, Long W.D.72mm

Reflect Fluorescent Kohler Illumination Mercury 100W Lamp

Transmit Critical Illumination, With Iris Aperture, Halogen 6V30W



**LPLAN** series long working distance plan infinity color corrected objectives, designed for living-cells culture in laboratory, clear image, good contrast, and also have a good performance under fluorescence observation.

**LPLAN PH** series long working distance infinity phase contrast objectives. In addition to the realization of the bright field observation, the phase contrast observation function has been developed to make the view showing a sense of relief and a substantial increase in image contrast and resolution.



Series	Magnification	N.A.	W.D.	F.N.	Cover Glass Thickness	Immersion	Spring
Lplan Series(PH)	Lplan4x	0.1	22	22	1.2	/	/
	Lplan10x	0.25	7.94	22	1.2	/	/
	Lplan PH10x	0.25	7.94	22	1.2	/	/
	Lplan20x	0.4	7.66	22	1.2	/	/
	Lplan PH20x	0.4	7.66	22	1.2	/	/
	Lplan40x	0.6	3.71	22	1.2	/	/
Lplan PH40x	0.6	3.71	22	22	1.2	/	/



**LPLAN-FLUOR** series infinity plan semi-apochromatic fluorescence objectives, adopting crystal optics materials, various types of chromatic aberration corrected perfectly, large numerical aperture design, provide you high-resolution, high-contrast microscopic images. **LPLAN-FLPH** series infinity plan semi-apochromatic phase contrast fluorescence objectives, with achieve bright field, phase contrast and fluorescence observation in one set objectives, eliminate your inconvenience of replacing different kinds of objectives to improve the observation efficiency and comfort.

Series	Magnification	N.A.	W.D.	F.N.	Cover Glass Thickness	Immersion	Spring
Lplan semi-apochromatic Series(PH)	Lplan FL2x	0.06	5.05	25	/	/	/
	Plan Fluor4x	0.13	18.52	25	1.2	/	/
	Plan Fluor10x	0.3	7.11	25	1.2	/	/
	Plan Fluor20x	0.45	5.91	25	1.2	/	/
	Lplan FLPH20x	0.45	5.91	25	1.2	/	/
	Plan Fluor40x	0.65	1.61	25	1.2	/	/
	Lplan FLPH40x	0.65	1.61	25	1.2	/	/
	Plan Fluor60x	0.75	1.04	25	1.2	/	/

# Product Specification

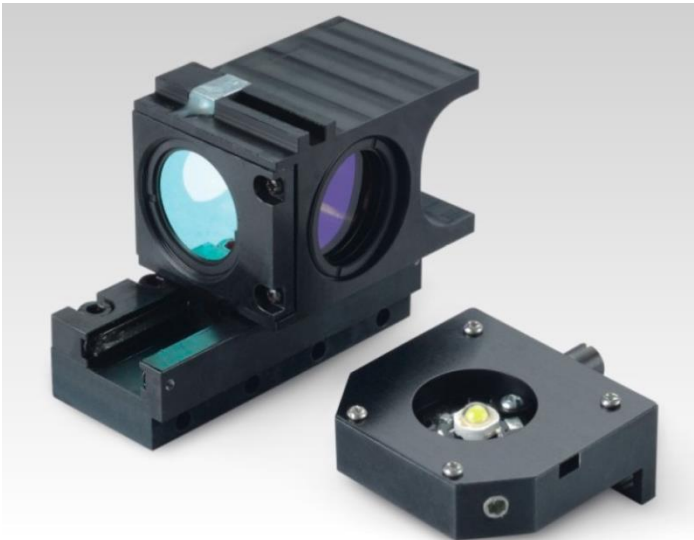
	A16.0901	A16.0901-CCD
Optical System	Infinity Color Corrected Optical System	
Head	Trinocular Head , Gemel Viewing Head, 45 Degree Inclined, Interpupillary Distance 54-75mm, Splitting Ratio 100:0 or 0:100	
Eyepiece	PL10x/22mm, High Eyepoint, Wide Field	
Nosepiece	Revolving Quintuple Nosepiece	
Objective	<b>LWD Infinity Plan Achromatic Objectives</b>	<b>LWD Infinity Plan Fluorescent Objectives</b>
	LWDPL10X/0.25, W.D.=7.94mm	LWDPLF4X/0.13, W.D.=18.52mm
	LWDPL20X/0.40, W.D.=7.66mm	LWDPLF10X/0.30, W.D.=7.11mm
	LWDPL40X/0.60, W.D.=3.71mm	
	<b>LWD Infinity Plan Semi-Apochromatic Objectives</b>	
		LWDPLFPH20X/0.45, W.D.=5.91mm
		LWDPLFPH40X/0.65, W.D.=1.61mm
	<b>LWD Infinity Plan Phase Contrast Objectives</b>	
	LWDPH20X/0.40, W.D.=7.66mm .	LWDPH10X/0.25, W.D.=7.94mm
Working Stage	Fixed Stage Size 250*160mm, Slider Clips	Fixed Stage Size: 250*160mm, Slider Clips
	/	Extension Plate and Coaxial Moveable Stage, Moving Range120*78mm
	--Glass Plate	--Glass Plate
	--Metal Plate	--Metal Plate with Kidney Slot
	--Petri Dish Holder, Dia.35mm	--Petri Dish Holder, Dia.35mm
	/	--Slide Holder, Dia.54mm, 26.5x76.4mm
	/	--Teraseki Holder, Dia.65mm, 56x81.5mm
Focusing	Coaxial Coarse & Fine Focusing System, Coarse Adjustment Range 9mm, Fine Adjustment Precision 0.002mm,with Tension Adjustment, with Safty Stop	
Condenser	LWD N.A.0.3 Kohler Illumination Condenser, With Phase Contrast Slide Slot, Long Working Distance 72mm. The Whole Set Can Be Rotated Down	
Phase Contrast	Phase Contrast Plug-board for 10x-40x, Center Adjustable Centering Telescope Dia. 30mm	
Filter	Dia.45mm Green Interference Filter	
	Dia.45mm Color Temperature Change Filter	
	Attenuation Plate, Transmission 25%	
Reflected Fluorescence illumination System	With Iris Field Diaphragm, Centering Adjustable	
	--U-LH100HG Mercury Lamp House, Filament Center and Focal Distance Adjustable, with Mirror, Mirror Center and Focal Distance Adjustable	
	--U1-RFLT100 Digital Power Control Box, Wide Voltage Range 90-240V AC	
	--Imported OSRAM 100W DC Mercury Bulb	
	Centered Objective For Mecury Bulb	
	Band-pass Fluorescent Filter <b>B, G</b>	Band-pass Fluorescent Filter <b>B, G, UV</b>
30ND25 Attenuation Plate		
CCD Adapter	0.67x CCD Adapter, for 2/3"CCD Camera	
CCD Camera	/	1.4M, 2/3"CCD, USB 2.0 Scientific Research Class Cold CCD Digital Camera
Light	<b>Critical Illumination</b> , With Iris Aperture, Halogen 6V30W, Pre-centered, Intensity Adjustable	
Power	Wide Voltage 90-240V	



# A16.0907-L

## LED Fluorescence Microscope, Phthisis Checking

OPTO-EDU



Built-in All-in-One Fluorescent Media Unit 5W LED With 1 or 2 Filters  
Infinity Plan Achromatic 10x/0.25, 20x/0.50, 40x/0.65, 100x/1.25  
Kohler N.A.1.25, With Socket for Phase Contrast and Dark Field Slides, Center Fixed  
B1 LED Fluorescent Intermediate Modular Wavelength 470nm  
Fluorescent Filter Band B4 Speically Used For Tuberculosis Inspection Optional

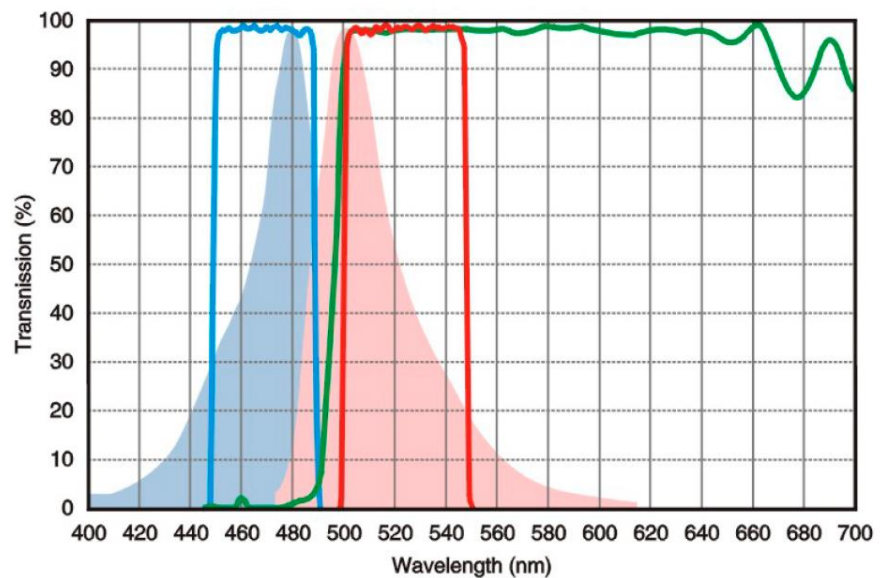


### Different LED Fluorescence Modules

Except for TB test module B4, can choose B1, G1 or UV2 fluorescence module according to different usages. Can also choose several modules and replace them when you need.

## High-performance Fluorescence Filters

High-performance Fluorescence Filters Have A High Transmittance Of The Spectrum, Good Depth And Steepness Of The Cutoff Line. Without A Cross Color But A High S/N Ratio, Fluorescence Imaging Contrast Was Promoted Dramatically. We Choose Stray Light Elimination Of The Background To The Filter Blocks. Thus, The Background Of The Image Becomes Darker, And The Fluorescence Brighter.



## Product Specification

### A16.0907-L LED Fluorescence Microscope

Optical System	Infinity Chromatic Aberration Correction System
Head	Trinocular, Light Split 8:2, 30° Inclined, 360° Rotatable, Interpupillary Distance 50~75mm
Eyepiece	PL10x/20mm, Wide Field, High Eye Point, Diopter Adjustable +/-5 Degree
Nosepiece	5 Holes Backward Nosepiece
Objective	Infinity Plan Achromatic 10x/0.25, 20x/0.50, 40x/0.65, 100x/1.25
Focusing	Low Position Coaxial Coarse & Fine Focusing Knob, with Safty Limitation and Tension Adjustment Ring. Coarse Range 25mm, Fine Precision 0.002mm
Working Stage	Double Layer Mechanical Stage 150*140mm, Moving Range 76*50mm, Precision 0.1mm
Condenser	Kohler N.A.1.25, With Socket for Phase Contrast and Dark Field Slides, Center Fixed
Filter	Blue, Dia.45
Light Source	3W LED, Intensity Adjustable, Center Fixed
LED Fluorescent	<b>B1</b> LED Fluorescent Intermediate Modular, With Brightness Adjust Knob, BF/FL Switch Knob, LED Center Wavelength 470nm, <b>Fluorescent Filter Band B1</b>
Power	90~240V Wide Range Power Supply

### A16.0907-L LED Fluorescence Microscope Optional Accessories

Head	Binocular Head 30° Inclined, 360° Rotatable, Interpupillary Distance Range 50~75mm	A53.0907-B30R
Eyepiece	PL10x/22mm, Wide Field, High Eye Point, Diopter Adjustable +/-5 Degree	A51.0904-1022T
Nosepiece	Backward Quintuple	A54.0930-BS5
Infinity Plan Achromatic Objective	2x/0.06, WD=5.03mm (Field Complement Is Needed)	A52.0906-2
	4x/0.10, WD=11.9mm	A52.0906-4
	10x/0.25, WD=12.1mm	A52.0906-10
	20x/0.40, WD=1.5mm	A52.0906-20
	40x/0.65, WD=0.36mm	A52.0906-40
	60x/0.85, WD=0.30mm	A52.0906-60
	100x/1.25, WD=0.18mm	A52.0906-100
Fluorescent	<b>G1</b> LED Fluorescent Intermediate Modular, With Brightness Adjust Knob, BF/FL Switch Knob, LED Center Wavelength 560nm, Fluorescent Filter Band G1	A5F.0912-G1
	<b>UV1</b> LED Fluorescent Intermediate Modular, With Brightness Adjust Knob, BF/FL Switch Knob, LED Center Wavelength 365nm, Fluorescent Filter Band UV1	A5F.0912-UV1
	<b>B4 Tuberculosis</b> Special LED Fluorescent Intermediate Modular, With Brightness Adjust Knob, BF/FL Switch Knob, LED Center Wavelength 455nm, Fluorescent Filter Band B4 Speically Used For Tuberculosis Inspection	A5F.0912-B4
Adapter	C-Mount 0.35x, Focus Adjustable, For 1/3 CCD	A55.0925-35
	C-Mount 0.5x, Focus Adjustable, For 1/2 CCD	A55.0925-05
	C-Mount 0.65x, Focus Adjustable, For 2/3 CCD	A55.0925-65
	C-Mount 1.0x, Focus Adjustable	A55.0925-10
	Photo Adapter with PK or MD mount, with 3.2x Photo Eyepiece	A55.0901-1
	Professional Photo C Mount, With Photo Eyepiece	A55.0910
Battery Box	A56.0913 Rechargeable Battery Box --Specially Designed For A16.0907-BL LED Fluorescence Microscope --Output DC6V, Large Capacity 5000mA, Rechargeable, --Size 26*16*11 cm	A56.0913



# A16.0908-L

LED Fluorescence Microscope, B,G,UV, Semi-APO, B4 Tuberculosis Phthisis Analysis Optional

**OPTO-EDU**



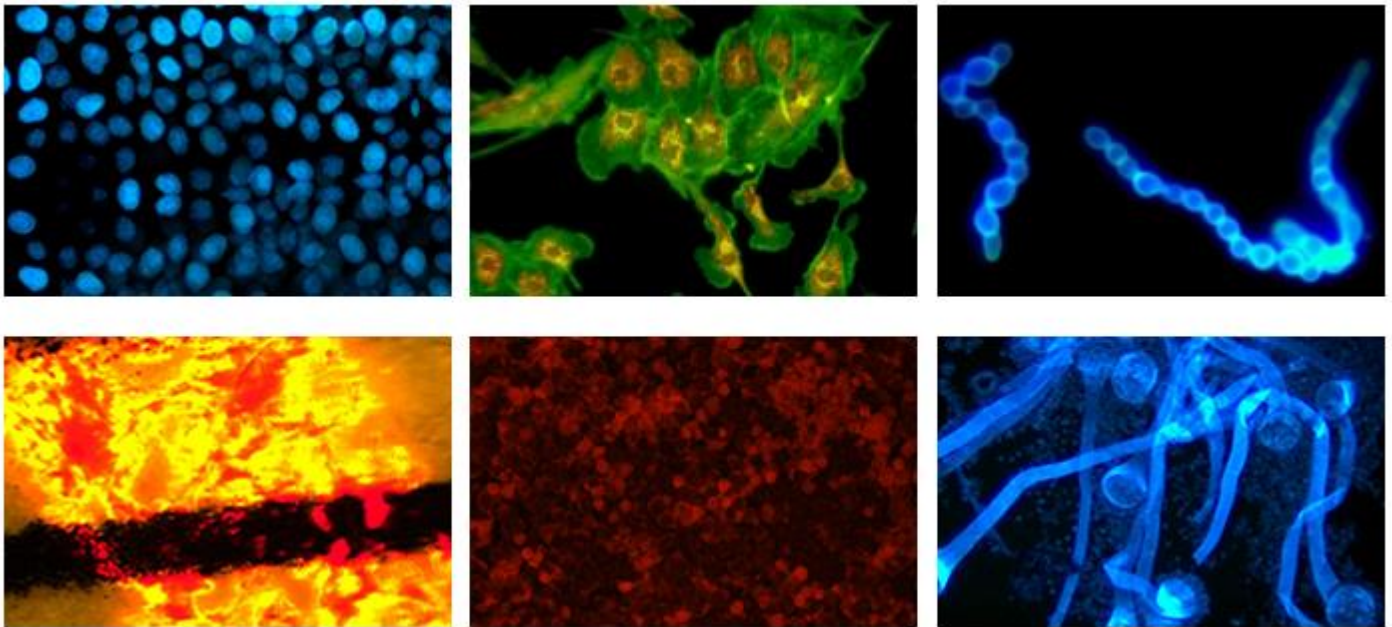
Easy To Change Halogen Bulb

Trinocular Head With PL10x/22mm High Eyepoint Eyepieces  
Mechanical Stage 175x145mm With Special Fabrication Processing, Anti-corrosive And Anti-friction  
Infinity Plan Semi-Apochromatic Fluorescence Objectives  
Four Channels LED Fluorescent Illumination With B,G,UV Filters  
Fluorescence Filter System B4 For Tuberculosis Phthisis Analysis





## Classic Case

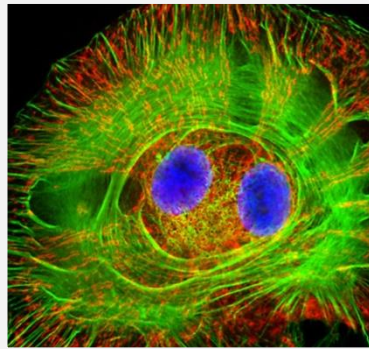
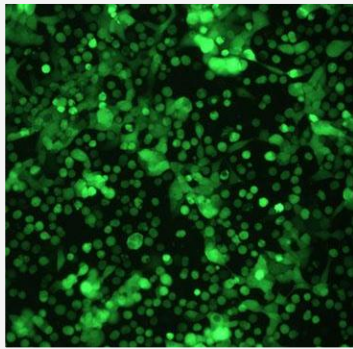
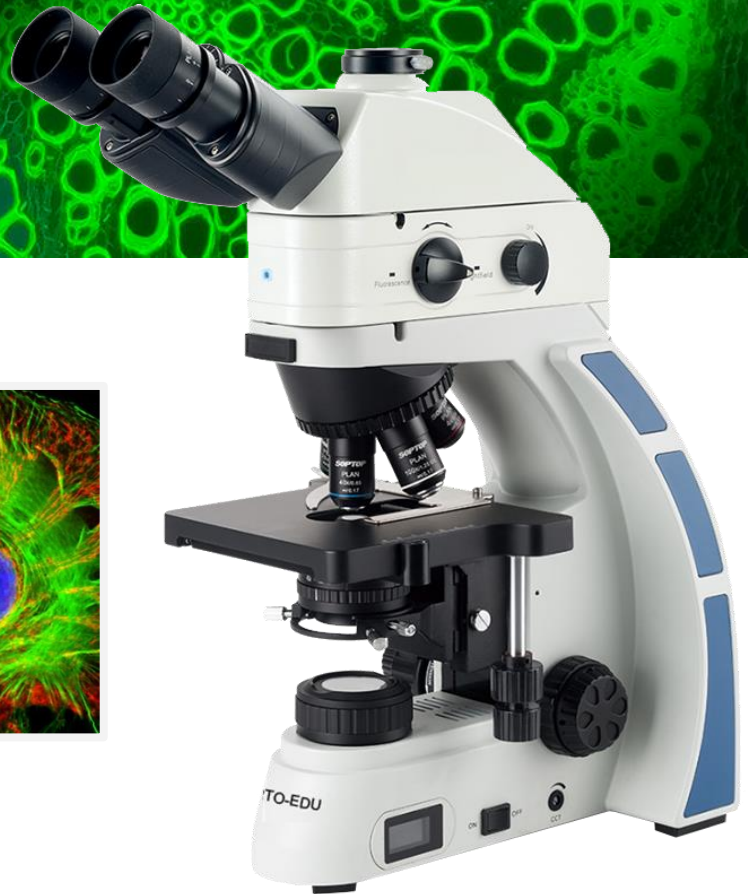


Item	A16.0908-L LED Fluorescence Microscope, APO Specification	
Optical System	Infinity Color Corrected Optical System	
Head	Compensation Trinocular Head, 30° Inclined, 360° Rotatable, Interpupillary Distance 54-75mm, Splitting Ratio Switch E100:P0/E0:P100, Diopter +/-5 Adjustable.	
Eyepiece	High Eye-Point Wide Field Plan Eyepiece PL10x/22mm, Reticle Can Be Assembled.	
Objective	Infinity Plan Semi-Apochromatic Fluorescence Objectives	4x/0.13, WD=15.13mm
		10x/0.3, WD=8.53mm
		20x/0.5, WD=2.33mm
		40x/0.75 (Spring), WD=0.55mm
100x /1.3(Spring, Oil ), WD=0.21mm		
Nosepiece	5 Holes Revolving Nosepiece, Inward	
Focusing	Coaxial Focus System With Upper Limited And Tension Adjustment; Coarse Range: 25mm; Fine Precision: 0.002mm; Focus Height Adjustable.	
Working Stage	175x145mm Double Layer Mechanical Stage, With Special Fabrication Processing, Anti-corrosive And Anti-friction; X,Y Moving Hand Wheel Swithable to Right or Left Hand; Moving Range: 76x50mm, Precision : 0.1mm.	
Condenser	N.A.1.2/0.22 Swing-out Type Achromatic Condenser	
Light Source	6V/30W Halogen, Pre-centered, Intensity Adjustable.	
Filter	Color Temperature Conversion Filter, Dia.45mm	
Reflected LED Fluorescence System	Four Channel LED Fluorescent Illumination	
	External Wide Voltage Transformer, Input 100V-240V, Output 6V2A	
	Eye Protecting Board	
	Center Wavelength 470nm LED Fluorescent Light, Fluorescence Filter System B1(or B2)	
	Center Wavelength 560nm LED Fluorescent Light, Fluorescence Filter System G1(or G2)	
Center Wavelength 385nm LED Fluorescent Light, Fluorescence Filter System UV2(or UV1)		
A16.0908-L Optional Accessories		
Eyepiece	WF15x/16mm, Diopter Adjustable,	A51.0904-1516T
Fluorescence Filter	Center Wavelength 455nm LED Fluorescent Light, Fluorescence Filter System B4 For Tuberculosis Phthisis Analysis	
CCD Adapter	1x C-Mount, Focus Adjustable	A55.0926-10
	0.50x, For 1/2" C-Mount, Focus Adjustable	A55.0926-50
	0.67x, For 2/3" C-Mount, Focus Adjustable	A55.0926-67
CCD Camera	1.4M, 2/3"Cold CCD Camera, SONY 2/3"ICX285AQ Sensor, Refrigeration To -20°, Standard Fluorescent Analysis Software.	A59.0921

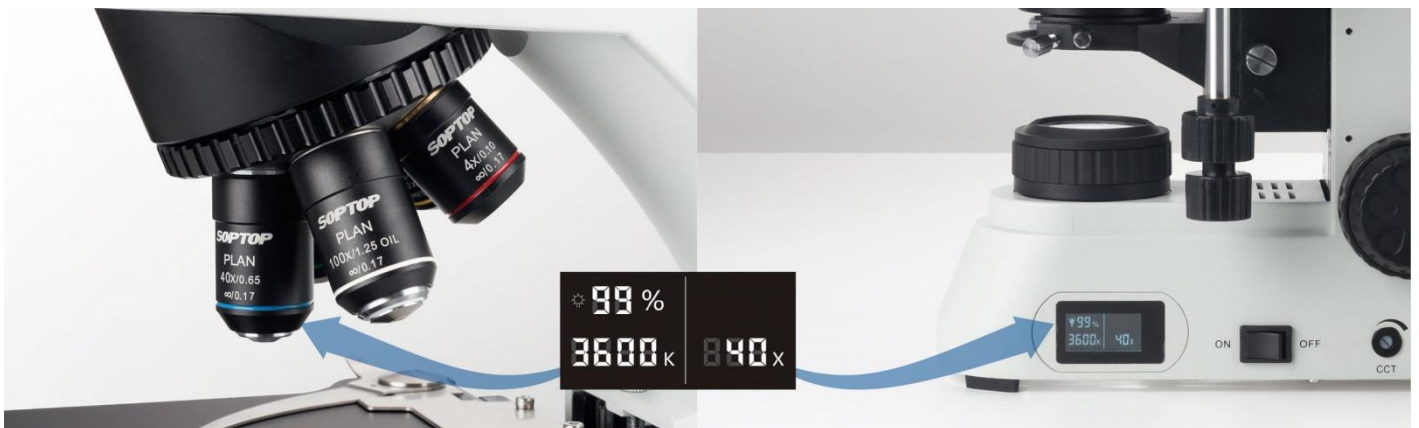
# A16.0911

## LED Fluorescence Microscope, Phthisis Checking

**OPTO-EDU**



Fluorescent Filter Band B4 Speically Used For Tuberculosis Inspection  
Built-in All-in-One Fluorescent Media Unit 5W LED With 1 or 2 Filters  
Infinity Plan Achromatic 10x/0.25, 20x/0.50, 40x/0.65, 100x/1.25  
Rackless Double Layer Mechanical Stage 150\*162mm, Moving Range 76\*50mm  
3W LED Illumination With LCD Information Screen Adjust Color Temperature 3000K-5600K



### Intelligent Illumination System

A16.0911 with code nosepiece is able to automatically remember the light intensity of each objective which you are used to, helps to improve the work efficiency and decrease the visual fatigue. LCD beside the frame shows color temperature and light intensity, as well as the objective magnification you are using, is helpful to make record of experiment condition.



# Product Specification

## A16.0911 LED Fluorescent Microscope, B4 For Phthisis Checking

Optical System	Infinity Chromatic Aberration Correction System
Head	Trinocular, Light Split 8:2, 30° Inclined, 360° Rotatable, Interpupillary Distance 50~75mm
Eyepiece	PL10x/20mm, Wide Field, High Eye Point, Diopter Adjustable +/-5 Degree
Nosepiece	5 Holes Backward Nosepiece
Objective	Infinity Plan Achromatic 10x/0.25, 20x/0.50, 40x/0.65, 100x/1.25
Working Stage	Rackless Double Layer Mechanical Stage 150*162mm, Moving Range 76*50mm, Precision 0.1mm
Focusing	Low Position Coaxial Coarse & Fine Focusing Knob, with Safty Limitation and Tension Adjustment Ring. Coarse Range 25mm, Fine Precision 0.002mm
Condenser	Kohler N.A.1.25, With Socket For Phase Contrast Slide
Light Source	3W LED, Intensity Adjustable, With LCD Information Screen, Showing Adjustable Color Temperature (3000K-5600K), With Brightness Memory Function
LED Fluorescent	<b>B4 Tuberculosis</b> Special LED Fluorescent Intermediate Modular, With Brightness Adjust Knob, BF/FL Switch Knob, LED Center Wavelength 455nm, Fluorescent Filter Band <b>B4 Speically Used For Tuberculosis Inspection</b>
Power	90~240V Wide Range Power Supply

## A16.0911 LED Fluorescence Microscope Optional Accessories

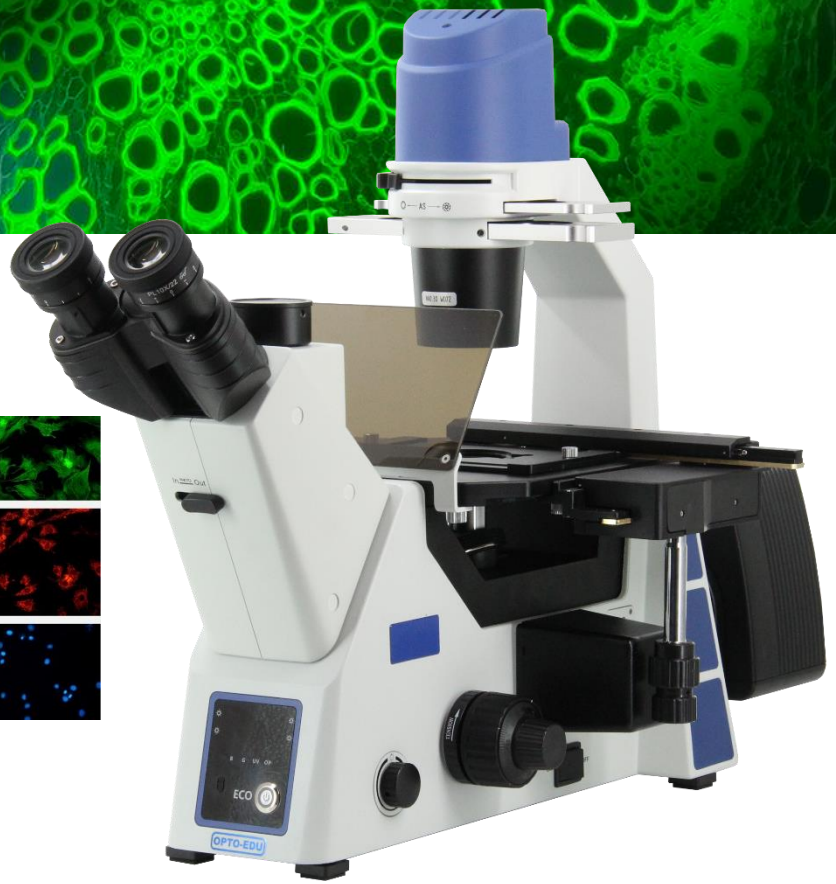
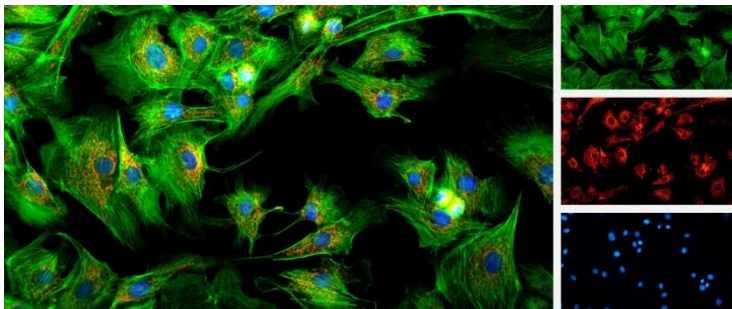
Head	Binocular Head 30° Inclined, 360° Rotatable, Interpupillary Distance Range 50~75mm	A53.0907-B30R
Eyepiece	PL10x/22mm, Wide Field, High Eye Point, Diopter Adjustable +/-5 Degree	A51.0904-N1022T
Infinity Plan Achromatic Objective	2x/0.06, WD=5.03mm (Field Complement Is Needed)	A52.0906-2
	4x/0.10, WD=11.9mm	A52.0906-4
	10x/0.25, WD=12.1mm	A52.0906-10
	20x/0.40, WD=1.5mm	A52.0906-20
	40x/0.65, WD=0.36mm	A52.0906-40
	60x/0.85, WD=0.30mm	A52.0906-60
	100x/1.25, WD=0.18mm	A52.0906-100
Infinity Plan Semi-Apochromatic Fluorescence Objectives	4x/0.13 W.D.=16.43mm	A5F.0931-4
	10x/0.30 W.D.=8.13mm	A5F.0931-10
	20x/0.50 W.D.=2.03mm	A5F.0931-20
	40x/0.75 W.D.=0.74mm	A5F.0931-40
	100x/1.28 W.D.=0.18mm	A5F.0931-100
Fluorescent	<b>B1</b> LED Fluorescent Intermediate Modular, With Brightness Adjust Knob, BF/FL Switch Knob, LED Center Wavelength 470nm, <b>Fluorescent Filter Band B1</b>	A5F.0912-G1
	<b>G1</b> LED Fluorescent Intermediate Modular, With Brightness Adjust Knob, BF/FL Switch Knob, LED Center Wavelength 560nm, Fluorescent Filter Band G1	A5F.0912-G1
	<b>UV1</b> LED Fluorescent Intermediate Modular, With Brightness Adjust Knob, BF/FL Switch Knob, LED Center Wavelength 365nm, Fluorescent Filter Band UV1	A5F.0912-UV1
Adapter	C-Mount 0.35x, Focus Adjustable, For 1/3 CCD	A55.0925-35
	C-Mount 0.5x, Focus Adjustable, For 1/2 CCD	A55.0925-05
	C-Mount 0.65x, Focus Adjustable, For 2/3 CCD	A55.0925-65
	C-Mount 1.0x, Focus Adjustable	A55.0925-10
	Photo Adapter with PK or MD mount, with 3.2x Photo Eyepiece	A55.0901-1
	Professional Photo C Mount, With Photo Eyepiece	A55.0910
Battery Box	A56.0913 Rechargeable Battery Box --Specially Designed For A16.0907-BL LED Fluorescence Microscope --Output DC6V, Large Capacity 5000mA, Rechargeable, --Size 26*16*11cm	A56.0913



# A16.0912-L

LED Inverted Fluorescence Microscope, Semi-APO, BF/PH/FL

**OPTO-EDU**



Professional Lab Inverted Microscope Combined BF+PH+FL Semi-APO Optical System  
LWD Infinity Plan Fluorescent 4x10x, LWD Infinity Plan Semi-APO 20x40x  
Working Stage 215x250mm, Attachable Stage Moving Range 120x78mm  
LWD Condenser N.A.0.3, W.D.78mm, Phase Contrast Slide + Centering Telescope  
Reflect Fluorescent LED 3 Bands, Fluorescent Filter B1, G1



## Three-Bands Filter Switching Mechanism

Automatically Switch Filters & LED Light Together And Show Filter Selected On Front Panel.  
Fluorescent Filters B1 470nm, G1 560nm, UV1 385nm

# Product Specification

A16.0912-L LED Semi-APO Fluorescence Microscope		Cata. No.	
Observation Method	Bright Field, Fluorescent, Phase Contrast		
Head	Trinocular Head 45° Inclined, 360° Rotatable, Interpupillary Distance 50-75mm, Light Splitting Ratio 100:0/0:100 Switchable		
Eyepiece	High Point Eyepiece, Wide Feld Plan PL10x/22mm, Diopter Adjustable	●	A51.0904-1022T
	High Point Eyepiece, Wide Feld Plan PL10x/22mm, Diopter Adjustable, With Reticle	○	A51.0905-1022R
	High Point Eyepiece, Wide Feld Plan PL15x/16mm, Diopter Adjustable	○	A51.0903-1516
Nosepiece	Quintuple Nosepiece		
Objective	LWD Infinity Plan Fluorescent Objective LWDPL4x/0.13, W.D.18.52mm	●	A5F.0932-4
	LWD Infinity Plan Fluorescent Objective LWDPL10x/0.3, W.D.7.11mm	●	A5F.0932-10
	LWD Infinity Plan Fluorescent Objective LWDPL20x/0.45, W.D.5.91mm	○	A5F.0932-20
	LWD Infinity Plan Fluorescent Objective LWDPL40x/0.65, W.D.1.61mm	○	A5F.0932-40
	LWD Infinity Plan Fluorescent Objective LWDPL60X/0.75, W.D.1.04mm	○	A5F.0932-60
	LWD Infinity Plan Semi-Apochromatic Phase Contrast Fluorescent Objective LWDPL20x/0.45 W.D.5.91mm	●	A5F.0933-20
	LWD Infinity Plan Semi-Apochromatic Phase Contrast Fluorescent Objective LWDPL40x/0.65 W.D.1.61mm	●	A5F.0933-40
Focusing	Coaxial Coarse & Fine Focusing System, With Tension Adjustment Ring, Coarse Focusing Range 9mm, Coarse-Oriented 6.5mm, 2.5mm Down, Fine Focusing Precision 0.002mm		
Working Stage	Fixed Working Stage Size 215x250mm		
	Glass Plate		
	Metal Plate (Kidney Hole)		
	Mechanical Mobile Ruler, Moving Range 120(X)x78(Y)mm		
	Stage Extension Plate		
	Petri Dish Holder Dia.35mm		
	Slides Holder Dia.54mm, And 26.5x76.5mm Teraseki Holder Dia.65mm, And 56x81.5mm		
Condenser	LWD Condenser N.A.0.3, Working Distance 72mm, Removeable		
Phase Contrast	Centre-Adjustable Phase Contrast Slide Plate, For N.A.0.3, With 2 Handles		
	Centering Telescop Dia.30mm		
Reflect Fluorescent Light Source	LED Fluorescent Lamp House, 4 Bands LED Switching By Servo Motor, Built-in LEDs For Fluorescent Filter 385nm, 470nm, And 560nm.		
	Three-Bands Filter Switching Mechanism, Automatically Switch Filters & LED Light Together And Show Filter Selected On Front Panel.		
	Fluorescent Filter B1 470nm	●	A5F.0924-B1
	Fluorescent Filter G1 560nm	●	A5F.0924-G1
Transmit Light Source	Fluorescent Filter UV1 385nm	○	A5F.0924-UV1
	5W LED Illumination, Intensity Adjustable, With Intelligent ECO System And Indicator In Front Panel		
	LBD Color Temperature Change Filter Dia.45mm IF550 Green Interference Filter Dia.45mm		
Main Body	Reflect and Transmit Frame Body		
Power Supply	External Wide Voltage Transformer, Input 100-240V, Output 12V5A		
Adapter	C-Mount 0.35x	○	A55.0934-35
	C-Mount 0.65x	○	A55.0934-65
	C-Mount 0.5x	○	A55.0934-05
	C-Mount 1.0x	○	A55.0934-10
Others	Spanner		
Packing	Foam+Carton, 1pc/Carton, 74*67*57cm, G.W.24Kgs		

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable



# A16.1023

## Inverted Fluorescence Microscope

**OPTO-EDU**



Inverted Infinity Optical Fluorescent Microscope, B,G,U,UV,B1 Available  
Infinity Plan LWD Achromatic, Phase Contrast, Fluorescent Objective Available  
ELWD Condenser N.A.0.3, Long Working Distance 72mm, Up to 150mm Without Condenser  
Phase Contrast Slide, 2 Holes For 10x-20x Objective  
Reflected Fluorescent System 100W HBO Mercury Lamp



**Fluorescent Attachment: Barrier, B. G. Filter, Power Supplier, Vertical**



**Optional A55.1002-1x C-mount**



**Optional A55.1002-0.45x C-mount**



# Product Specification

A16.1023 Inverted Fluorescence Microscope		
Optical System	Infinity Optical System	
Head	Seidentopf Trinocular Head, 30° Inclined, Interpupillary 48~75mm, Diopter Adjustable	
Eyepiece	Extra Wide Field Eyepiece EW10x/22mm, High Eyepoint	
Nosepiece	Quintuple Nosepiece	
Objective	Infinity Plan LWD Achromatic Objective	4x/0.1, W.D.18mm
		40x/0.6, W.D.2.6mm, Cover Glass 1.2mm
	Infinity Plan Phase Contrast Achromatic Objective	PH10x/0.25, W.D.10mm
		PH20x/0.40, W.D.5.1mm
Focusing	Coaxial Coarse & Fine Adjustment, Coarse Stroke 37.7mm Per Rotation, Fine Stroke 0.2mm Per Rotation	
Working Stage	Plain Stage 160*250mm --Glass Insert Plate --Auxiliary Stage 70*180mm	
Condenser	ELWD Condenser N.A.0.3, Long Working Distance 72mm, Up to 150mm Without Condenser	
Phase Contrast	Phase Contrast Slide, 2 Holes For 10x-20x Objective	
Fluorescent System	Reflected Fluorescent System --Power Supplier Box, 220V/110V Interchangeable, Digital Display --100W HBO Ultra Hi-Voltage Spherical Mercury Lamp --Barrier To Resist Ultraviolet Light --Fluorescent Free Oil --Blue Excitation Filter, BP460~490, DM500, BA520 --Green Excitation Filter, BP480~550, DM570, BA590	
Filter	Green, Blue, Ground Glass, Dia.45mm	
Illumination	External Kohler Illumination, Halogen Lamp 6V30W, Brightness Adjustable	

# Accessories

A16.1023 Inverted Fluorescence Microscope Optional Accessories				
Objective	Infinity Plan LWD Achromatic Objective	10x/0.25, W.D.10mm	A5M.1031-10	
		20x/0.4, W.D.5.1mm	A5M.1031-20	
Phase Contrast	Infinity Plan Phase Contrast Achromatic Objective	PH40x/0.6, W.D.0.35mm	A5C.1023-40	
	Centering Telescope, Tube Dia.30mm		A5C.1011-30	
	Phase Contrast Slide, 3 Holes For 10x-20x-40x Objective		A5C.1013-3	
Fluorescent System	Infinity Plan Fluorescent Objective	4x/0.13/0.17, W.D.16.3	A5F.1031-4	
		10x/0.3/0.17, W.D.12.4	A5F.1031-10	
		20x/0.5/0.17, W.D.1.5	A5F.1031-20	
		40x/0.75/0.17, W.D.0.35	A5F.1031-40	
		Blue Excitation (B1) Filter, BP460~495, DM505, BA510~550		A5F.1010-B1
		Ultraviolet Excitation Filter, BP330~385, DM400, BA420		A5F.1010-U
		Violet Excitation Filter, BP400~410, DM455, BA455		A5F.1010-V
		Neutral Filter ND6		A5F.1011-6
	Neutral Filter ND25		A5F.1011-25	
	Epi-Fluorescent Centering Slide		A5F.1012	
Working Stage	Attachable Mechanical Stage, X-Y Coaxial Control, Moving Range 120*78mm		A54.1006-XY	
	Terasaki Holder		A54.1006-T	
	Petri Dish Holder Dia.38mm		A54.1006-38	
	Slide Glass Holder Dia.54mm		A54.1006-54	
	Slide Glass Holder Dia.90mm		A54.1006-90	
Adapter	Photo Adapter		A55.1001	
	C-Mount 1.0x		A55.1002-10	

# A16.2701

## Fluorescent Microscope

**OPTO-EDU**



Binocular, OMEGA B/G , infinity plan objectives

### Product Specification

Specification	A16.2701 Fluorescent Microscope	B2	B4	T2	T4
Optical System	UCIS infinity independent achromatic optical system				
Head	Seidentopf binocular head 30° inclined, rotatable 360°, interpupillary distance 52-75mm, Diopter Adjustable	●	●		
	Seidentopf trinocular head 30° inclined, rotatable 360°, interpupillary distance 52-75mm, Diopter Adjustable			●	●
Magnification	40x - 1000x				
Eyepiece	WF10x/20mm, high eyepoint up to 21mm,				
Objective	Infinity plan achromatic objectives 4x, 10x, 40x(s) and 100x (s/oil)				
Focus System	Low positioned, coaxial coarse & fine focusing system with tension adjustment and up-limited, coarse 14mm/rot, fine 0.1mm/rot, minimum reading 1µm on left-side fine knob, moving range 20mm				
Nosepiece	Quadruple, reversed type with positive click stops				
Illumination	Kohler Illumination, with field diaphragm				
Condenser	Abbe condenser N.A. 1.25 with iris diaphragm and phase contrast socket				
Stage	Right hand controls, brightness adjustable, low position, mechanical stage, 156mm x 138mm, movement range 76mm x 54mm				
Flourescent Attachment	Epi-reflected fluorescence illumination system: 100W mercury lamp house and 100W power supply unit				
Excitation Filter	B,G, OMEGA Brand	●		●	
	B,G,UV,V , OMEGA Brand		●		●
Light Source	250V/5A Φ5X20 fuse				
	6V20W Halogen lamp				
	250x/3.15A Φ5x20 fuse				
Other	Blue Φ38				
	Immersion Oil				
	Dust cover				
	Power cord				

Optional Accessories		Item No.
Head	Binocular Head,30° Inclined, 360° Rotatable, Interpupillary Distance 48-75m, ±5 Diopter Adjustment	A53.2702-2A
	Trinocular Head,30° Inclined, 360° Rotatable, Interpupillary Distance 48-75mm, ±5 Diopter Adjustment	A53.2704-2A
Eyepiece	Plan WF10x/22mm, high eyepoint up to 21mm	A51.2701-10C
	Plan WF16x/13mm,high eyepoint	A51.2701-1613
	Plan WF10x/20mm, reticule eyepiece	A51.2703-10A
Objective	Infinity plan achromatic objectives 4x	A52.2706-04C
	Infinity plan achromatic objectives 20x(s)	A52.2706-20C
	Infinity plan achromatic objectives 60x(s)	A52.2706-60C
Nosepiece	Quadruple, reversed type with positive click stops	A54.2704-B
Condenser	Swing out condenser	A56.2701-30A
Stage	Upgrade to mechanical stage 185x177mm platform, moving range 75x50mm, low positioned x-y coaxial control knob (right or left hand),two slides holder	A54.2701-2C
Illumination	6V/30W Halogen Illumination	A56.2703-30
	6V30W Osram Halogen Bulb	A56.2703-30C
	100W Osram Mercury Lamp	A5F.2716-I
LED Flourescent Attachment	5W LED lamp house	
	Power supply unit for 5W LED lamp house	
	Excitation Filter UV, OMEGA Brand	A5F.2710-IUV
	Excitation Filter V, OMEGA Brand	A5F.2710-IV
	Excitation Filter B, OMEGA Brand	A5F.2710-IB
	Excitation Filter G, OMEGA Brand	A5F.2710-IG
Filter Φ38	Green	A56.2706-G
	Yellow	A56.2706-Y
	Frosted Glass	A56.2706-F
Adapter	1.0x C-Mount	A55.2701-10
	0.25x C-Mount	A55.2701-25



# A16.2702

## Inverted Fluorescent Microscope

**OPTO-EDU**



Quintuple Nosepiece, With Positive Click Stops

Epi Fluorescent 100W Fluorescent Light & OMEGA Filter B/G/U/UV  
 Binocular Head With Side Photo Port For Standard C-Mount Digital Camera  
 LWD Infinity Plan 10x20x40x & LWD Infinity Plan Phase Contrast 20x  
 Large Size Working Stage 240x260mm Moving Range 135x85mm  
 Right Hand Universal Joint Moving Knob For X/Y Movement Control

### Product Specification

Specification	A16.2702 Inverted Fluorescent Microscope	2i	4i
Optical System	UCIS Infinity Independent Achromatic Optical System		
Frame	One-piece Construction from Arm to Base		
Head	Seidentopf Binocular Head, 45° Inclined, Interpupillary Distance 52-75mm, Left Tube ±5 Diopter Adjustment		
Eyepiece	WF10x/20mm, Plan, High Eyepoint up to 21mm,		
Centering Attachment	Centering Telescope 10x For Phase Contrast		
Objective	Infinity LWD Plan Achromatic Objective 10x/0.25 W.D.9.67		
	Infinity LWD Plan Achromatic Objective 20x/0.40 W.D.7.97		
	Infinity LWD Plan Achromatic Objective 40x/0.60 W.D.3.76		
	Infinity LWD Plan Phase-Contrast Objective (Positive) 20x/0.40 W.D.7.97		

Focus System	Low Positioned, Coaxial Coarse & Fine Focusing System with Adjustable Tension Control and Upper Limit Stop, Minimum Reading 1µm, Moving Range 12mm
Nosepiece	Quintuple, Reversed Type with Positive Click Stops
Condenser	Abbe Condenser N.A. 0.30 with Iris Diaphragm, with Phase Contrast Slider & Filter (φ34) Blue, Green & Yellow, Long Work Distance 72mm
Stage	Right Hand Controls, Low Position, Mechanical Stage, Size 240x260mm, Moving Range 135x85mm. Right Hand Universal Joint Moving Knob For X/Y Movement Control
	Drop Specimen Holder (φ118)
	Slide Specimen Holder (76x26, φ54)
Light Source	6V30W Halogen Lamp House
	Electrical Part for 6V30W Halogen Lamp
	6V30W Halogen Bulb (Osram)
	250V/3.15A φ5X20 Fuse
	Power Supply 110-240V, 50/60Hz

## Product Specification

Specification	A16.2702 Inverted Fluorescent Microscope	2i	4i
Epi-Fluorescent Illumination	100W DC Mercury Lamp House, Multi-Functional Semi-Reflector		
	Power Supply Unit for 100W DC Mercury Lamp		
	5 Holes Turret Fluorescent Filter Disc, Can Hold Max 4 Bands Filters + 1 Hole For Bright Field View		
	100W Mercury Bulb (Osram)		
	250V/5A φ5X20 Fuse		
	<b>Excitation Filter B/G, CHROMA Brand</b>	○	
	--Blue Excitation Filter, BP460~490, DM500, BA520		
	--Green Excitation Filter, BP510~550, DM570, BA590		
	<b>Excitation Filter B/G/U/V, CHROMA Brand</b>		○
	--Blue Excitation Filter, BP460~490, DM500, BA520		
--Green Excitation Filter, BP510~550, DM570, BA590			
--UltraViolet Excitation Filter, BP330~385, DM400, BA420			
--Violet Excitation Filter, BP400~410, DM455, BA455			
Phase Contrast	Phase Contrast Slider for 10x, 20x, 40x		
Adapter	Camera Port On Right Side Of Base With 0.5x C-Mount		
Other	Allen Screw Driver 2mm		
	Allen Screw Driver 2.5mm		
	Dust Cover		
	Power Cord		

# Product Specification

Optional Accessories		Item No.
Head	Seidentopf Binocular Head, 45° Inclined, Interpupillary Distance 48-75mm, Diopter Adjustable	A53.2702-1A
Eyepiece	WF10x/22mm Plan Eyepiece, High Eyepoint	A51.2701-10C
	WF10x/20mm, Plan, High Eyepoint Up to 21mm, Diopter Adjustable	A51.2701-10A1
	WF16x/13mm, Plan	A51.2701-1613
Objective	Infinity Plan Achromatic Objective 4x	A52.2706-04C
	Infinity LWD Plan Achromatic Objective 60x	A52.2706-60LB
	Infinity LWD Plan Phase-Contrast Objective 10x (Positive)	A5C.2735-10PB
	Infinity LWD Plan Phase-Contrast Objective 40x (Positive)	A5C.2735-40PB
	Infinity LWD Plan Phase-Contrast Objective 10x (Negative)	A5C.2735-10NB
	Infinity LWD Plan Phase-Contrast Objective 20x (Negative)	A5C.2735-20NB
	Infinity LWD Plan Phase-Contrast Objective 40x (Negative)	A5C.2735-40NB
Stage	Mechanical Stage, Size 350x208mm, Moving Range 50x50mm	A54.2706-5
Adapter	0.25x C-Mount	A55.2701-25A
	Digital Camera Adapter (Need to Know Camera Brand)	A55.2702-2
Bulb	6V30W Halogen Bulb	A56.2703-30C
Specimen Holder	125x85mm	A54.2706-3
Epi-Fluorescent Illumination	100W DC Mercury Lamp House	A5F.2712
	Power Supply Unit for 100W DC Mercury Lamp	A5F.2713
	Epi-fluorescent Illumination, Multi-functional Semi-reflector	A5F.2714
	Excitation Filter B, CHROMA Brand	A5F.2710-IB
	Excitation Filter G, CHROMA Brand	A5F.2710-IG
	Excitation Filter U, CHROMA Brand	A5F.2710-IU
	Excitation Filter V, CHROMA Brand	A5F.2710-IV
	100W Mercury Bulb	A5F.2716-H
	100W Mercury Bulb (Osram)	A5F.2716-I
Empty Filter Cube	A5F.2727	



# A17.0940

## Multi-Viewing Microscope, 10 People

**OPTO-EDU**



9 pcs Binocular + 1 pc Trinocular Head For Multi-Viewing For 10 People  
PL10x22mm Eyepiece Infinity Plan Objective 4x10x20x40x100x  
LED Pointer In View Field For Teaching, Brightness Adjustable  
Double Layer Mechanical Stage 175x145mm Moving 76x50mm  
10W LED, Pre-Centered, Intensity Adjustable.

### A17.0940 Multi-Viewing Microscope, 10 Position

Head	9 Pcs Compensation Binocular Head, 30° Inclined, 360° Rotatable, Interpupillary Distance 54-75mm. 1 Pc Compensation Trinocular Head 30° Inclined, 360° Rotatable, Interpupillary Distance 54-75mm.
Eyepiece	High Eye-point Wide Field Plan Eyepiece PL10x22mm, Reticle Can Be Assembled.
Objective	Infinity Plan Achromatic Objectives 4x, W.D.=7.18mm 10x, W.D.=4.70mm 20x, W.D.=1.75mm 40x(Spring), W.D.=0.72mm 100x(Spring, Oil), W.D.=0.15mm
Nosepiece	5 Holes Revolving Nosepiece, Backward
Stage	Double Layer Mechanical Stage 175x145mm, With Special Fabrication Processing, Anti-corrosive And Anti-friction; X/Y Moving Hand Wheel In Right Or Left Hand; Moving Range 76x50mm, Precision 0.1mm
Condenser	N.A.1.2/0.22 Swing-out Type Achromatic Condenser
Focusing	Coaxial Focus System With Upper Limited And Tension Adjustment;
Light Source	10W LED, Pre-Centered, Intensity Adjustable.
Filter	Blue
Pointer	LED Pointer, Brightness Adjustable

# A17.1112

## Multi-Viewing Microscope, 10 People

**OPTO-EDU**



1pc Trinocular Head, 9pcs Binocular Heads, For 10 Peoples  
Infinity Optical System WF10x/22mm Infinity Plan 4x,10x,40x,100x Objectives  
Mechanical Working Stage 180x160mm/ Moving Range 80x50mm  
Kohler Illumination, 12V100W Halogen Lamp  
LED Cursor For Mult-View Teaching Brightness Adjustable

### A17.1112 Multi-Viewing Microscope, 10 People Deca Heads

Head	Seidentopf Trinocular Head 30° Inclined, 360° Rotatable, Interpupillary Distance 50-75mm, 1 pc
	Seidentopf Binocular Head 30° Inclined, 360° Rotatable, Interpupillary Distance 50-75mm, 9 pcs
Eyepiece	High Eye-point Wide Field Plan Eyepiece WF10x/20mm
Objective	Infinity High Contrast Plan Achromatic Objectives 4x,10x, 40x(S), 100x(O,S)
Nosepiece	Backward Quaduple Nosepiece
Stage	Double Layer Mechanical Stage 180*160mm, Ceramic Coated, Moving Range 80x50mm, Double Slide Holder
Condenser	N.A.1.2/0.22 Swing-out Type Achromatic Condenser
Focusing	Coaxial Coarse & Fine Focus System, With Upper Limit And Tension Adjustment; Fine Precision 0.002mm
Light Source	Kohler Illumination, 12V100W Halogen Lamp, With Field Diaphragm, Iris Diaphragm, Continue Brightness Adjustable
Filter	Blue
Pointer	LED Cursor Pointer, Brightness Adjustable



# A18.1816-A

## Questioned Document Examination System

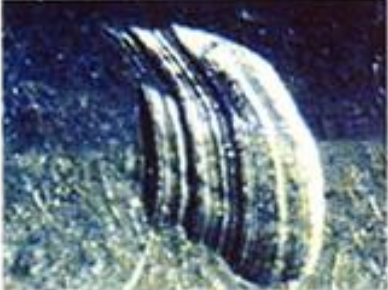
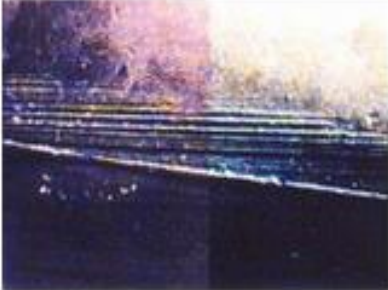

OPTO-EDU



Magnification 1~30x Motorized Zoom Control  
1/3" CCD 800 Lines Digital Camera  
Transmit & Reflect All Kinds Light Source  
Exciting Filter 9 Bands, Receiving Filter 9 Bands  
Incl. Software+Laptop, Wooden Packing

### A18.1816-A Used With A30.1801 Forensic Image Analysis Software Crime Image

The comparison between two bullets from same pistol

		
Joint of the trail of bullet ejection	Joint of the trail of warhead rifling	Comparison between trail of firing pin on bottom of the bullet



# Product Specification

## A18.1816 Questioned Document Examination Analyzer

A18.1816 Questioned Document Examination Analyzer is an ideal tool to inspect, observe and compare many kinds of objects, evidences including:

--All kind of questioned documents: Used of different kinds of writing instruments, by adding, altering, conceal, forgery and other methods of fade contract, IOUs, real estate contracts, invoices, bills of exchange, checks, bills of lading, passports and so on.

--Various fluorescent encryption securities: checks, stocks, credit cards, stamps and special trademarks.

--Identify cards, resident identify cards, temporary residence permits, etc.

--Currency: US Dollars, H.K. Dollars, RMB, etc.

Light Source System	Main Light Source : 1x 24V/150W Halogen Lamp, With Cooling Fan, Focusing Lens, And Heat-Resistance Glass Cover
	UVC: Short-Wave Ultraviolet Light 254nm, 1x10W
	UVA: Long-Wave Ultraviolet Light 365nm, 1x10W
	Upper Visible Side Light: 1x50W, With Lamp Holder Which Can Adjust Position And Angle Freely, Used To Check Indentation
	Transmitted White Light 2x20W
	Excitation Wavelength: 000nm,365nm,450nm,465nm,515nm,530nm,565nm,580nm,900nm
	Receiving Filter: 000nm,415nm,450nm,565nm,700nm,720nm,740nm,800nm,900nm
Video Camera System	High Sensitive, High Resolution 1/3" CCD Color Digital Camera, 650 Lines, Sensitivity 0.001 Lux, Especially Sensitive To Near-Infrared And Visible Spectral Bands Light Source.
	Electrical Zoom Lens, Aperture 1.2, Zoom Ranges 1~30x
Function	Fluorescent Light Source With Multi Excitation And Receiving Filter Combinations, Can Exam And Compare The Different Inks Used On Documents
	Reflect Light And Receiving Filter Combination, Can Exam The Reflection And Absorption Of Different Wavelengths On Different Inks.
	Reflect Light And Receiving Filter Combination, Can Exam The Transmission Of Different Wavelength Infrared Light On The Different Inks.
	Transmit Light And Receiving Filter Combination, Can Exam The Transmission Of Different Wavelength Infrared Light On The Different Inks
	Reflect Side Light Can Exam The Scratch, Cut Marks On documents.
	Transmit Light Can Illuminate From The Bottom Side To Exam The Scratch, Cut Marks On Documents.

## Samples to choose light source according to different objects.

Objects	Light Source	Excitation	Receiving	Exam
Distinguish Altered Or Added Text By Different Kinds Of Ink	Excitation	485-550 nm	700-900 nm	Alter
Natural Subside Text On Thermal Paper, Carbon Paper	Excitation	480-550 nm	700-740 nm	Subside
Phosphor Fingerprint	Excitation	480-550 nm	700-740 nm	Fluorescent
Multilayer Indentation	Reflected Light _ Side	000nm	900nm	Indentation
Text On The Black Cloth	Reflected Light _ Side	000nm	900nm	Covered Text
Text In The Kraftpaper Envelopes	Transmitted Light _ UV	000nm	900nm	Transmit
Correction Fluid	Transmitted Light _ UV	000nm	900nm	Alter
Security Trademark	UVC	000nm	000nm	Real/False
Currency Fluorescent	UVA	000nm	000nm	Fluorescent

# A18.1818

## Questioned Document Examination System

**OPTO-EDU**

Magnification 1~30x Motorized Zoom Control  
1/3" CCD 800 Lines Digital Camera  
Transmit & Reflect All Kinds Light Source  
Exciting Filter 7 Bands, Receiving Filter 7 Bands  
Incl. Software+Laptop, Wooden Packing



Fluorescent Anti-counterfeiting Mark  
Excited Filter 580nm  
Receiving Filter 740nm, Magnification 6x



Building Anti-counterfeiting Mark  
Receiving Filter 700nm, Magnification 2x

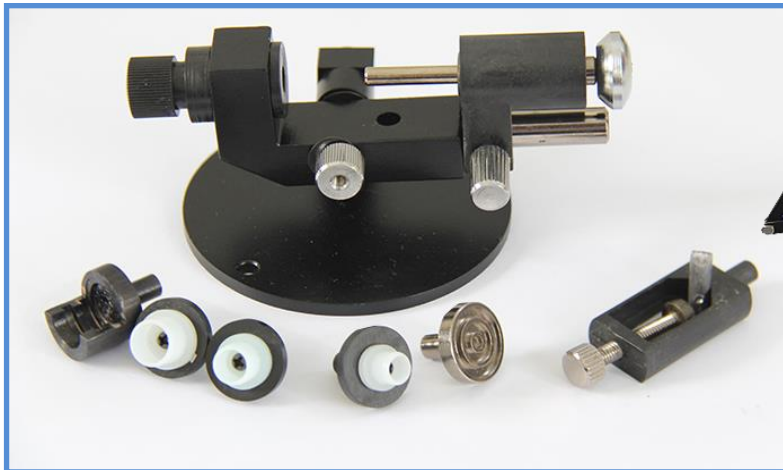
## Product Specification

Items	A18.1818 Document Examination System
Light Source	Strong Light 1x24V/150W Halogen
	Ultra Violet 365nm, 1x10W Check Fluorsent View
	Side Light 1x50w, Check Infra Reflect
	Transmit Light 2x20W White, Check Water Mark
	Excited Filter: High Transmittance Narrow Half Width Band-pass Filter 000nm, 365nm, 440nm, 530nm, 555nm, 585nm, 615nm
	Receiving Filter: 000nm, 450nm, 565nm, 700nm, 720nm, 800nm, 900nm
Image Reception	1~30x Motorized Zoom, 1/3" CCD 800 Lines Digital Camera
Software	Incl. Software+Laptop
Packing	Wooden Packing

# A18.1825

Comparison Microscope, Step Zoom, 3.2~192x

**OPTO-EDU**



Step Zoom Lens Optical Magnification Up To 3.2x~192x  
 Left/Right, Split, Overlapping Image For Forensic Comparison View  
 Halogen 50W, LED 5W, Polarizing, Coaxial, UV Light Source  
 Separation Line Adjust & Magnification Correcting System  
 Square & Round Working Stage Joint Moving Up/Down

## Product Specification

Mag./Viewfield		Eyepiece		Photo Adapter	Video Adapter	Working Distance
		Eyepiece10X	Eyepiece20X			
Objective	Bridge Body					
0.8X	1.2X	9.6X/φ28	19.2X/φ17	2.5X	0.5X	101mm
1.25X		15X/φ18	19.2X/φ17			
2X		24X/φ11	48X/φ7			
3.2X		36X/φ7	77X/φ4.5			
4.8X		58X/φ4.2	115X/φ2.3			

Total Magnification with 0.8x objective, auxiliary lens 0.4x, WF10x eyepiece, magnification = 0.8\*0.4\*10=3.2x



## A18.1825 Digital Forensic Comparison Microscope Specification

Magnification	3.2x~192x	
Head	Binocular Head, 30° Incline, Interpupillary Distance 48~75mm, Diopter +/-5 Adjustable	
Eyepiece	WF10x/22mm, High Eyepoint	
	WF20x/12mm, High Eyepoint	
Objective	5 Step Zoom Plan Objective 0.8x, 1.25x, 2x, 3.2x, 4.8x	
	Auxiliary Lens 0.4x, 2.0x	
Working Distance	101mm	
View Field	Dia. 2.3~62mm	
Magnification Correcting	Magnification Correction System, With Correcting Lens	
Separation Line Adjusting	Separation Line Adjust System In Back, With Special Designed Adjust Driver	
Working Stage	Square Manual Working Stage 90*90mm, Moving Range 54*54*54mm	
	Round Tiltable Working Stage Dia. 90mm, 0-45° Inclined, 360° Rotatable	
	Joint Left/Right Moving Range 54mm, Joint Up/Down Range 60mm	
Light Source	12V50W Fan Cooling Strong Halogen Light, Brightness Adjustable, 2pcs	
	5W LED Cold Light, High Brightness, Brightness Adjustable, 2pcs	
	Coaxial Light Lens, To Observe In Deep Hole, Or Smooth Object Surface, 2pcs	
	Polarizing Light Lens, To Eliminate Flare Lights And Dazzling Lights, 2pcs	
	Ultraviolet Light Lens, 2pcs	
	Filters: Red, Blue, Yellow, Green, 2pcs Each Color	
Adapter	0.5x CCD Adapter For Digital Camera, , 1pc	
	Front View Photo Adapter 2.5X For SLR Digital Camera (Nikon And Canon)	
Power	80~240V Wide Range Voltage	
Bullet Holder	Standard Bullet Holder 2 Sets	
Dimension	Instrument Size 37*30*63cm	

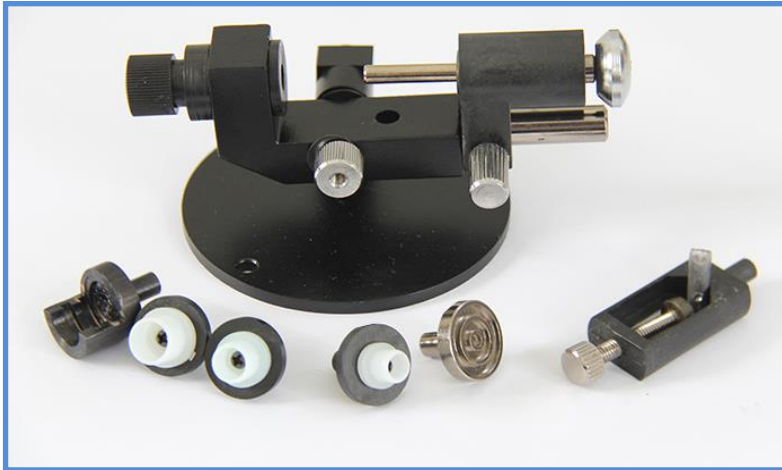
### Optional Accessories

Light Source	150W Cold Light Source, With Optical Fiber & Light Collector	A56.1821
Bullet Holder	Motorized Bullet Holder 1 Set	A54.1813
LCD Pad Digital Camera	9.7" LCD Pad Digital Camera, Android System, See A18.1825-LCD	A59.3520

# A18.1825-LCD

LCD Comparison Microscope, Step Zoom, 3.2~192x

**OPTO-EDU**



10.1" LCD Digital Camera + Step Zoom Lens Magnification 3.2x~192x  
 Left/Right, Split, Overlapping Image For Forensic Comparison View  
 Halogen 50W, LED 5W, Polarizing, Coaxial, UV Light Source  
 Separation Line Adjust & Magnification Correcting System  
 Square & Round Working Stage Joint Moving Up/Down

## Product Specification

Mag./Viewfield		Eyepiece		Photo Adapter	Video Adapter	Working Distance
		Eyepiece10X	Eyepiece20X			
Objective	Bridge Body					
0.8X	1.2X	9.6X/φ28	19.2X/φ17	2.5X	0.5X	101mm
1.25X		15X/φ18	19.2X/φ17			
2X		24X/φ11	48X/φ7			
3.2X		36X/φ7	77X/φ4.5			
4.8X		58X/φ4.2	115X/φ2.3			

Total Magnification with 0.8x objective, auxiliary lens 0.4x, WF10x eyepiece, magnification =  $0.8 \times 0.4 \times 10 \times 1.2 = 3.8x$

## A18.1825-LCD Digital Forensic Comparison Microscope Specification

LCD Pad Digital Camera	9.7" LCD Pad Digital Camera, Android System, 5.0 M Pixels, Full Resolution 2592*1936 1* Mini USB2.0, 1*HDMI, 1* Micro-SD Card Slot (Up to 32GB), 1* 3.5mm Standard Stereo Earphone Slot,1* SIM Card Slot Details see A59.3520	
Magnification	3.8x~230x	
Head	Binocular Head, 30° Incline, Interpupillary Distance 48~75mm, Diopter +/-5 Adjustable	
Eyepiece	WF10x/22mm, High Eyepoint	
	WF20x/12mm, High Eyepoint	
Objective	5 Step Zoom Plan Objective 0.8x, 1.25x, 2x, 3.2x, 4.8x	
	Auxiliary Lens 0.4x, 2.0x	
Working Distance	101mm	
View Field	Dia. 2.3~62mm	
Magnification Correcting	Magnification Correction System, With Correcting Lens	
Separation Line Adjusting	Separation Line Adjust System In Back, With Special Designed Adjust Driver	
Working Stage	Square Manual Working Stage 90*90mm, Moving Range 54*54*54mm	
	Round Tilttable Working Stage Dia. 90mm, 0-45° Inclined, 360° Rotatable	
	Joint Left/Right Moving Range 54mm, Joint Up/Down Range 60mm	
Light Source	12V50W Fan Cooling Strong Halogen Light, Brightness Adjustable, 2pcs	
	5W LED Cold Light, High Brightness, Brightness Adjustable, 2pcs	
	Coaxial Light Lens, To Observe In Deep Hole, Or Smooth Object Surface, 2pcs	
	Polarizing Light Lens, To Eliminate Flare Lights And Dazzling Lights, 2pcs	
	Ultraviolet Light Lens, 2pcs	
	Filters: Red, Blue, Yellow, Green, 2pcs Each Color	
Adapter	0.5x CCD Adapter For Digital Camera	
	Front View Photo Adapter 2.5X For SLR Digital Camera (Nikon And Canon)	
Power	80~240V Wide Range Voltage	
Bullet Holder	Standard Bullet Holder 2 Sets	
Dimension	Instrument Size 37*30*63cm	

### Optional Accessories

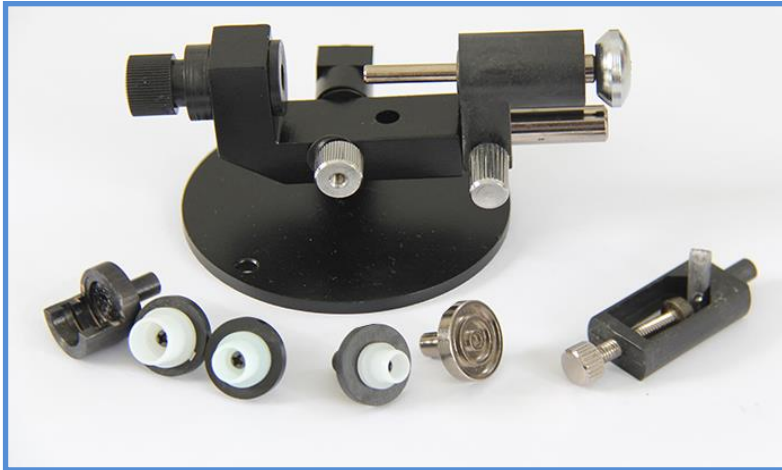
Light Source	150W Cold Light Source, With Optical Fiber & Light Collector	A56.1821
Software	Professional Forensic Image Analysis Software	A30.1821
Bullet Holder	Motorized Bullet Holder 1 Set, Used With Software	A54.1813



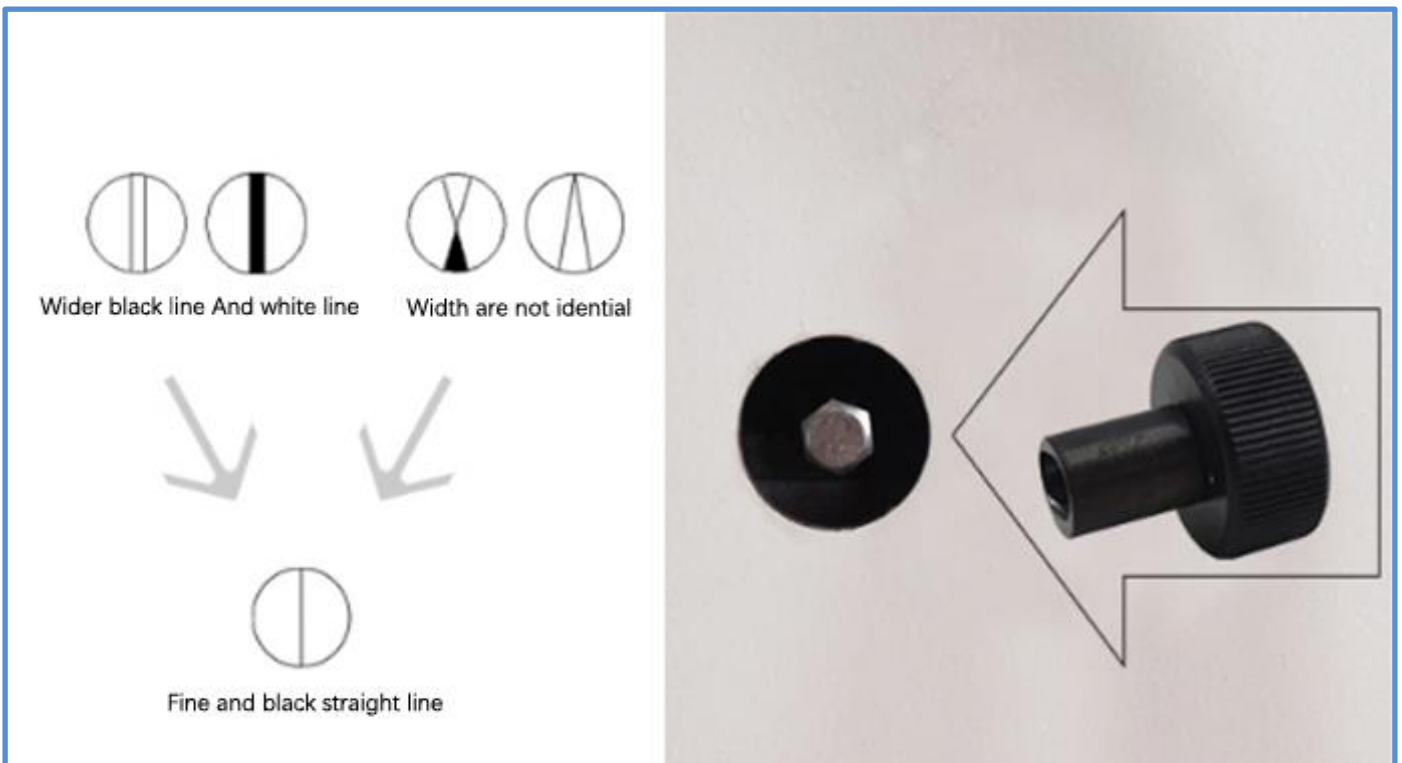
# A18.1828

Comparison Microscope, 2~240x

OPTO-EDU



Total Optical Magnification Up To 2x~240x With 6 Holes Nosepiece  
Left/Right, Split, Overlapping Image For Forensic Comparison View  
Halogen 50W, LED 5W, Polarizing, Coaxial, UV Light Source  
Separation Line Adjust & Magnification Correcting System  
Square & Round Working Stage Joint Moving Up/Down



Separation Line Adjust System in Black, with special designed adjust driver

# Product Specification

Mag./Viewfield \ Eyepiece	10X	20X	Photo Adapter	Video Adapter	Working Distance
Objective					
1X	10X/φ21	20X/φ12	1.8X	0.5X	101mm
1.5X	15X/φ15	30X/φ8	2.7X		
2X	20X/φ11	40X/φ6	4X		
4X	40X/φ6	80X/φ3	7X		
6X	60X/φ3.9	120X/φ2	11X		
0.5X	5X/φ60	10X/φ24	0.9X		143mm

## A18.1828 Forensic Comparison Microscope Specification

Magnification	2x~240x
Head	Binocular Head, 30° Incline, Interpupillary Distance 48~75mm, Diopter +/-5 Adjustable
Eyepiece	WF10x/22mm, High Eyepoint
	WF20x/12mm, High Eyepoint
Nosepiece	6 Hole Click Stop Nosepiece
Objective	LWD Infinity Plan Achromatic Objective 0.5x, 1x, 1.5x, 2x, 4x,6x
	Auxiliary Lens 0.4x, 2.0x
Working Distance	101mm
View Field	Dia. 2.3~62mm
Magnification Correcting	Magnification Correction System, With Correcting Lens
Separation Line Adjusting	Separation Line Adjust System In Back, With Special Designed Adjust Driver
Working Stage	Square Manual Working Stage 90*90mm, Moving Range 54*54*54mm
	Round Tiltable Working Stage Dia. 90mm, 0-45° Inclined, 360° Rotatable
	Joint Left/Right Moving Range 54mm, Joint Up/Down Range 60mm
Light Source	12V50W Fan Cooling Strong Halogen Light, Brightness Adjustable, 2pcs
	5W LED Cold Light, High Brightness, Brightness Adjustable, 2pcs
	Coaxial Light Lens, To Observe In Deep Hole, Or Smooth Object Surface, 2pcs
	Polarizing Light Lens, To Eliminate Flare Lights And Dazzling Lights, 2pcs
	Transmit Bottom Light, 2pcs
	Ultraviolet Light Lens, 2pcs
	Filters: Red, Blue, Yellow, Green, 2pcs Each Color
Adapter	0.5x CCD Adapter For Digital Camera, 1pc
	Front View Photo Adapter 2.5X For SLR Digital Camera (Nikon And Canon)
CCD Camera	Built-in 3.0M High Resolution Color CCD Camera, USB 2.0 Output, 2048*1536 Pixels, Pixel Size 3.2*3.2μm
Power	80~240V Wide Range Voltage
Bullet Holder	Standard Bullet Holder 2 Sets, Bullet Holder Set for all kinds of Bullet, Cartridge and other Objects
Dimension	Instrument Size 43*34*65cm

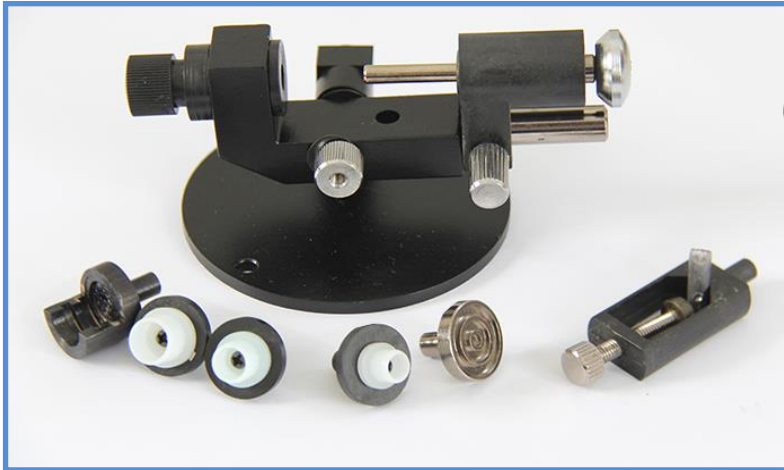
## Optional Accessories

Light Source	150W Cold Light Source, With Optical Fiber & Light Collector	A56.1821
Software	Professional forensic image analysis software	A30.1821
Bullet Holder	Motorized Bullet Holder 1 Set	A54.1813
Digital Camera	9.7" LCD Pad Digital Camera, Android System, See A18.1828-LCD	A59.3520

# A18.1828-LCD

LCD Comparison Microscope, 2~240x

OPTO-EDU



Total Optical Magnification Up To 2x~240x With 6 Holes Nosepiece  
Left/Right, Split, Overlapping Image For Forensic Comparison View  
Halogen 50W, LED 5W, Polarizing, Coaxial, UV Light Source  
Separation Line Adjust & Magnification Correcting System  
Square & Round Working Stage Joint Moving Up/Down

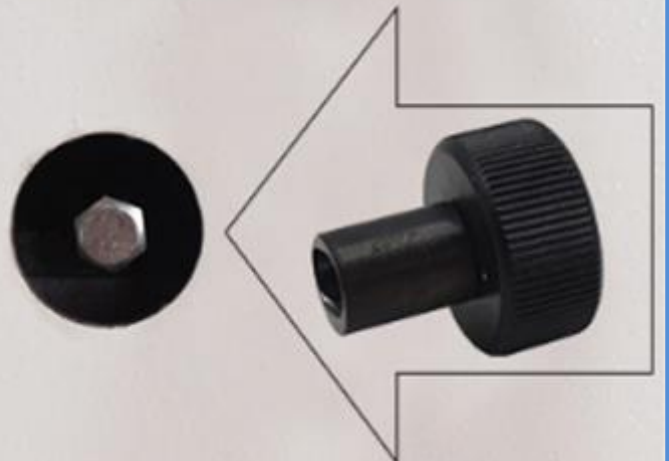


Wider black line And white line

Width are not identical



Fine and black straight line



Separation Line Adjust System in Black, with special designed adjust driver



# Product Specification

Mag./Viewfield \ Eyepiece	10X	20X	Photo Adapter	Video Adapter	Working Distance
Objective					
1X	10X/φ21	20X/φ12	1.8X	0.5X	101mm
1.5X	15X/φ15	30X/φ8	2.7X		
2X	20X/φ11	40X/φ6	4X		
4X	40X/φ6	80X/φ3	7X		
6X	60X/φ3.9	120X/φ2	11X		
0.5X	5X/φ60	10X/φ24	0.9X		143mm

## A18.1828-LCD Forensic Comparison Microscope Specification

LCD Pad	9.7" LCD Pad Digital Camera, Android System, 5.0 M Pixels, Full Resolution 2592*1936 1* Mini USB2.0, 1*HDMI, 1* Micro-SD Card Slot (Up to 32GB), 1* 3.5mm Standard Stereo Earphone Slot, 1* SIM Card Slot Details see A59.3520
Magnification	2x~240x
Head	Binocular Head, 30° Incline, Interpupillary Distance 48~75mm, Diopter +/-5 Adjustable
Eyepiece	WF10x/22mm, High Eyepoint WF20x/12mm, High Eyepoint
Nosepiece	6 Hole Click Stop Nosepiece
Objective	LWD Infinity Plan Achromatic Objective 0.5x, 1x, 1.5x, 2x, 4x,6x Auxiliary Lens 0.4x, 2.0x
Working Distance	101mm
View Field	Dia. 2.3~62mm
Magnification Correcting	Magnification Correction System, With Correcting Lens
Separation Line Adjusting	Separation Line Adjust System In Back, With Special Designed Adjust Driver
Working Stage	Square Manual Working Stage 90*90mm, Moving Range 54*54*54mm Round Tilttable Working Stage Dia. 90mm, 0-45° Inclined, 360° Rotatable Joint Left/Right Moving Range 54mm, Joint Up/Down Range 60mm
Light Source	12V50W Fan Cooling Strong Halogen Light, Brightness Adjustable, 2pcs 5W LED Cold Light, High Brightness, Brightness Adjustable, 2pcs Coaxial Light Lens, To Observe In Deep Hole, Or Smooth Object Surface, 2pcs Polarizing Light Lens, To Eliminate Flare Lights And Dazzling Lights, 2pcs Ultraviolet Light Lens, 2pcs Filters: Red, Blue, Yellow, Green, 2pcs Each Color
Adapter	0.5x CCD Adapter For Digital Camera, 1pc Front View Photo Adapter 2.5X For SLR Digital Camera (Nikon And Canon)
CCD Camera	Built-in 3.0M High Resolution Color CCD Camera, USB 2.0 Output, 2048*1536 Pixels, Pixel Size 3.2*3.2μm
Power	80~240V Wide Range Voltage
Bullet Holder	Standard Bullet Holder 2 Sets, Bullet Holder Set for all kinds of Bullet, Cartridge and other Objects
Dimension	Instrument Size 43*34*65cm

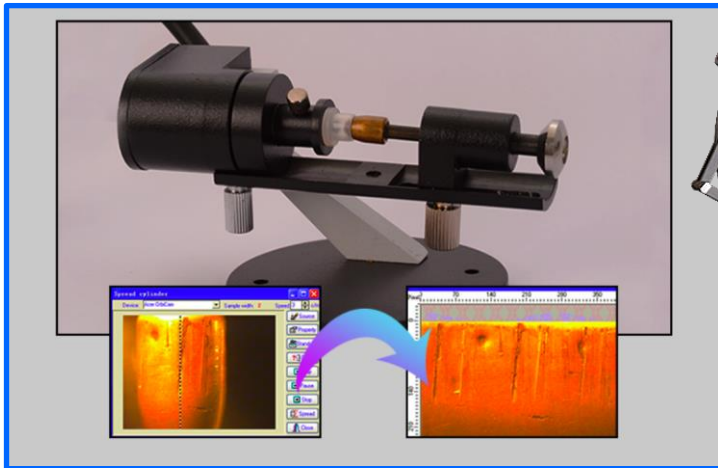
## Optional Accessories

Light Source	150W Cold Light Source, With Optical Fiber & Light Collector	A56.1821
Software	Professional Forensic Image Analysis Software	A30.1821
Bullet Holder	Motorized Bullet Holder 1 Set, Used With Software	A54.1813

# A18.1829

## LCD Comparison Microscope, 2~240x

**OPTO-EDU**



Total Optical Magnification Up To 2x~240x With 6 Holes Nosepiece  
Left/Right, Split, Overlapping Image For Forensic Comparison View  
Halogen 50W, LED 5W, Polarizing, Coaxial, UV Light Source  
Separation Line Adjust & Magnification Correcting System  
Square & Round Working Stage Joint Moving Up/Down

### Product Specification

Objective	Eyepiece 10X	Eyepiece 20X	Photograpging & Video System	Working Distance
	Mag./Viewfield φ22mm	Mag./Viewfield φ12mm		
1X/0.03	10X/φ22	20X/φ12	Measure According to Monitor & Digital Camera	102mm
1.5X/0.04	15X/φ15	30X/φ8		
2X/0.05	20X/φ11	40X/φ6		
4X/0.072	40X/φ5.5	80X/φ3		
6X/0.075	60X/φ3.7	120X/φ2		
0.5X/0.02	5X/φ44	10X/φ24		138mm

<b>A18.1829 Motorized Digital Forensic Comparison Microscope, With Motorized Working Table</b>	
Magnification	2x~240x
Head	0-45° Tiltable Binocular Head, Interpupillary Distance 48~75mm, Diopter +/-5 Adjustable
Eyepiece	WF10x/22mm, High Eyepoint
	WF20x/12mm, High Eyepoint
Nosepiece	6 Hole Click Stop Nosepiece
Objective	LWD Infinity Plan Achromatic Objective 0.5x, 1x, 1.5x, 2x, 4x,6x
	Auxiliary Lens 0.4x, 2.0x
Working Distance	101mm
View Field	Dia. 2.3~62mm
Magnification Correcting	Magnification Correction System, With Correcting Lens
Separation Line Adjusting	Separation Line Adjust System In Back, With Special Designed Adjust Driver
Working Stage	Square Manual Working Stage 90*90mm, Moving Range 54*54*54mm
	Round Tiltable Working Stage Dia. 90mm, 0-45° Inclined, 360° Rotatable
	Joint Left/Right Moving Range 54mm, Joint Up/Down Range 60mm
Light Source	12V50W Fan Cooling Strong Halogen Light, Brightness Adjustable, 2pcs
	5W LED Cold Light, High Brightness, Brightness Adjustable, 2pcs
	Coaxial Light Lens, To Observe In Deep Hole, Or Smooth Object Surface, 2pcs
	Polarizing Light Lens, To Eliminate Flare Lights And Dazzling Lights, 2pcs
	Transmit Bottom Light (Built-in Working Stage)
	Ultraviolet Light Lens, 2pcs
Adapter	Filters: Red, Blue, Yellow, Green, 2pcs Each Color
	0.5x CCD Adapter For Digital Camera,1pc
CCD Camera	Front View Photo Adapter 2.5X For SLR Digital Camera (Nikon And Canon)
	Built-in 3.0M High Resolution Color CCD Camera, USB 2.0 Output,2048*1536 Pixels, Pixel Size 3.2*3.2µm
Software	Professional Forensic Image Analysis Software
	Motorized/Manual Viewfield Changeover Full /Split /Overlapping Image
	Motorized/Manual Control Working Stage X/Y/Z 3D Movement
	Motorized/Manual Control Round Working Stage Rotation +/- Direction
Power	Motorized/Manual Control To Change Objective Magnification
	80~240V Wide Range Voltage
Bullet Holder	Standard Bullet Holder 2 Sets, Bullet Holder Set for all kinds of Bullet, Cartridge and other Objects
Dimension	Instrument Size 40*60*72cm

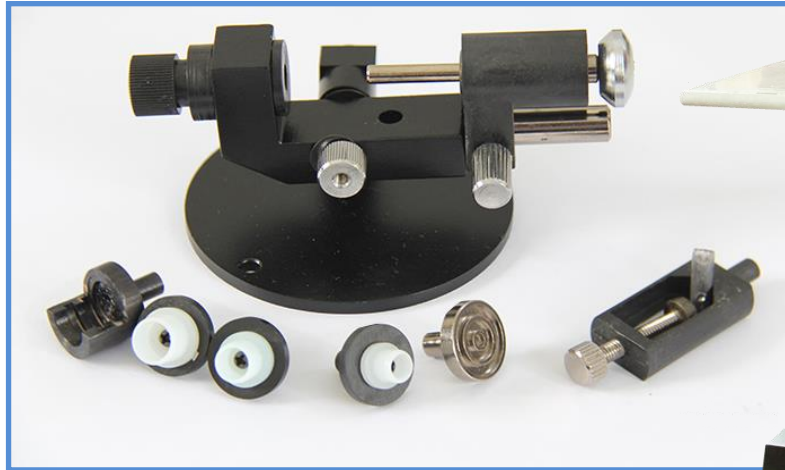
<b>Optional Accessories</b>		
Light Source	150W Cold Light Source, With Optical Fiber & Light Collector	A56.1821
Bullet Holder	Motorized Bullet Holder 1 Set	A54.1813



# A18.1830

Motorized Digital Comparison Microscope, 2x~240x,  
With Motorized Table

OPTO-EDU



Total Magnification 2x~240x With 6 Holes Nosepiece With Motorized Working Table  
Left/Right, Split, Overlapping Image For Forensic Comparison View  
Halogen 50W, LED 5W, Polarizing, Coaxial, UV Light Source  
Separation Line Adjust & Magnification Correcting System  
Motorized Square & Round Working Stage Joint Moving Up/Down

## Product Specification

Objective	Eyepiece 10X	Eyepiece 20X	Photograping & Video System	Working Distance
	Mag./Viewfield $\phi 22\text{mm}$	Mag./Viewfield $\phi 12\text{mm}$		
1X/0.03	10X/ $\phi 22$	20X/ $\phi 12$	Measure According to Monitor & Digital Camera	102mm
1.5X/0.04	15X/ $\phi 15$	30X/ $\phi 8$		
2X/0.05	20X/ $\phi 11$	40X/ $\phi 6$		
4X/0.072	40X/ $\phi 5.5$	80X/ $\phi 3$		
6X/0.075	60X/ $\phi 3.7$	120X/ $\phi 2$		
0.5X/0.02	5X/ $\phi 44$	10X/ $\phi 24$		138mm

<b>A18.1830 Motorized Digital Forensic Comparison Microscope, With Motorized Working Table</b>	
Magnification	2x~240x
Head	0-45° Titable Bionocular Head, Interpupillary Distance 48~75mm, Diopter +/-5 Adjustable
Eyepiece	WF10x/22mm, High Eyepoint
	WF20x/12mm, High Eyepoint
Nosepiece	6 Hole Click Stop Nosepiece
Objective	LWD Infinity Plan Achromatic Objective 0.5x, 1x, 1.5x, 2x, 4x,6x
	Auxiliary Lens 0.4x, 2.0x
Working Distance	101mm
View Field	Dia. 2.3~62mm
Magnification Correcting	Magnification Correction System, With Correcting Lens
Separation Line Adjusting	Separation Line Adjust System In Back, With Special Designed Adjust Driver
Working Stage	Square Manual Working Stage 90*90mm, Moving Range 54*54*54mm
	Round Tiltable Working Stage Dia. 90mm, 0-45° Inclined, 360° Rotatable
	Joint Left/Right Moving Range 54mm, Joint Up/Down Range 60mm
Light Source	12V50W Fan Cooling Strong Halogen Light, Brightness Adjustable, 2pcs
	5W LED Cold Light, High Brightness, Brightness Adjustable, 2pcs
	Coaxial Light Lens, To Observe In Deep Hole, Or Smooth Object Surface, 2pcs
	Polarizing Light Lens, To Eliminate Flare Lights And Dazzling Lights, 2pcs
	Transmit Bottom Light (Built-in Working Stage)
	Ultraviolet Light Lens, 2pcs
	Filters: Red, Blue, Yellow, Green, 2pcs Each Color
Adapter	0.5x CCD Adapter For Digital Camera,1pc
	Front View Photo Adapter 2.5X For SLR Digital Camera (Nikon And Canon)
CCD Camera	Built-in 3.0M High Resolution Color CCD Camera, USB 2.0 Output,2048*1536 Pixels, Pixel Size 3.2*3.2µm
Software	Professional Forensic Image Analysis Software
	Motorized/Manual Viewfield Changeover Full /Split /Overlapping Image
	Motorized/Manual Control Working Stage X/Y/Z 3D Movement
	Motorized/Manual Control Round Working Stage Rotation +/- Direction
	Motorized/Manual Control To Change Objective Magnification
Working Table	A18.1830 Include Motorized Working Table, Size 60*120mm, Height 65mm, Motorized Up/Down 160mm
Power	80~240V Wide Range Voltage
Bullet Holder	Standard Bullet Holder 2 Sets, Bullet Holder Set for all kinds of Bullet, Cartridge and other Objects
Dimension	Instrument Size 40*60*72cm

<b>Optional Accessories</b>		
Light Source	150W Cold Light Source, With Optical Fiber & Light Collector	A56.1821
Bullet Holder	Motorized Bullet Holder 1 Set	A54.1813

# A18.1831

Comparison Microscope, Step Zoom, 3.2~288x

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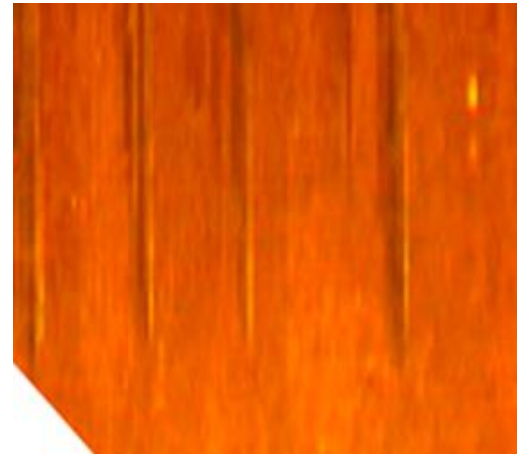
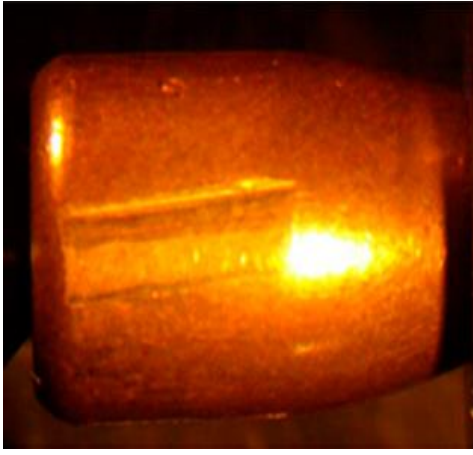
Step Zoom Lens Optical Magnification Up To 3.2x~288x  
Left/Right, Split, Overlapping Image For Forensic Comparison View  
Halogen 50W, LED 5W, Polarizing, Coaxial, UV Light Source  
Separation Line Adjust & Magnification Correcting System  
Square & Round Working Stage Joint Moving Up/Down

LED 5W Light Source



Halogen 12V50W Fan  
Cooling Light Source





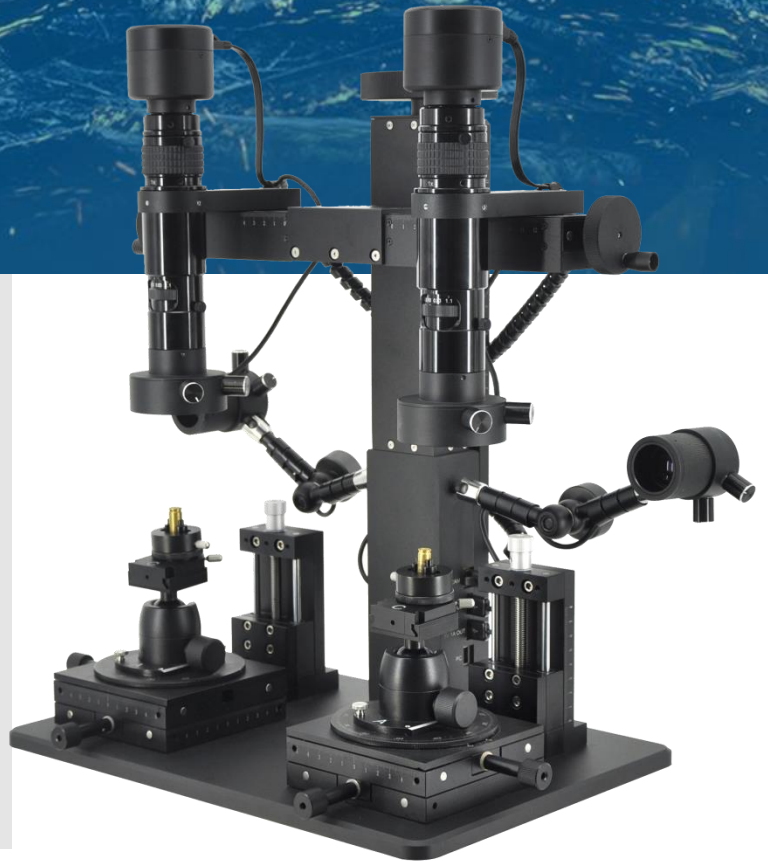
## Product Specification

A18.1831 Comparison Microscope	
Total Magnification	3.2x-288x
Head	Binocular 45° Inclined, 48-75mm
Eyepiece	WF10X/22mm, WF20X/12mm
Step Zoom Lens	0.8x, 1.25x, 2x, 3.2x, 4.8x
Auxiliary Lens	0.4x, 2.0x
View Field	Full Left, Full Right, Split Image, Overlapping Image, 2mm-60mm
Working Stage	Moving Range: X-55mm, Y-55mm, Z-65mm, 0° -45° Inclination Adjustable
	Joint Left/Right Moving Range 62mm, Joint Up/Down Range 80mm
	Round Stage, 360° Rotating
	Bullet Holder 2 Sets
Bridge	Motorized Up/Down
Light Source	5W LED+12V/50W Halogen+108 LEDS Ring Light UV Filter Filter Red/Blue/Yellow/Green
Camera	3.0M Digital Camera, Built-in CCD
Adapter	0.5x C-Mount
	Photo Adapter For Cannon SLR
Function Panel	Touch Type, User-Friendly Design, Easy To Operate And Accurate
Power	Power Supply 80-240V

# A18.4902

## Digital Comparison Microscope

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Total Magnification 3.8x~230x

Full Left/Right, Split-image Or Overlapping Image Comparison

Separation Line Adjusting System

Full Range Light Source Accessories Included

Light Source Brightness Adjustable, Position & Angle Adjustable Freely

## Product Specification

### A18.4902 Digital Forensic Comparison Microscope Specification

Hardware configuration	
Image Sensor	SONY IMX274 COMS Sensor
Expose Mode	Rolling Shutter .
Maximum Resolution	3840 x 2160 (8,294,400 pixels)
Sensor Optical Format	1/2.5"
Pixel Size	1.62μm x 1.62μm
Dynamic Range	>80dB
SNRmax	≥50dB
Spectral Characteristics	380-650nm
Exposure Capability	Real-time Auto, Single Auto, Manual Adjustment
White Balance	Real-time Auto, Single Auto, Manual Adjust R G B Separately
Record Format	Snapshot Picture Format: JPG Resolution: 3840x2160 Record Video Format: MOV Resolution: 3840X2160@25FPS,2592X1944@25FPS,2048x1536@25FPS



### Optical Parameters

Optical Magnification Of Lines	0.83x~10x
Optical Resolution Of Lines(um)	5um
Working Distance(mm)	72mm
Observation Range(mm)	0.65x0.36~8.2x4.6mm
Comprehensive Magnification	Full Screen Display On A 21-inch 16:9 Minitor:57x~715x Full Screen Display On A 17-inch 16:9 Minitor:46x~578x
Working Stage	Square Manual Working Stage 120*120*43mm, Moving Range 55*55*55mm
	Joint Left/Right Moving Range 80mm, Joint Up/Down Range 150mm
	Clamp Working Stage Dia.100mm, 360° Rotatable
	Round Titable Working Stage Moving Range 0-14.5mm, 45°-90° Inclined, 360° Rotatable

### Ring LEDs( Coaxial & Diffuse LED ) Parameters

Power	<3W
Input Voltage	DC 5V
Dimming Method	0-100% Linear Adjustment
Centric Brightness	Coaxial: ≥12000LX (Height 100mm)
	Diffuse Reflection: ≥42000LX (Height 100mm)
Number Of LEDs	Coaxial Light: 13 Small Angle Highlighting Lamp Beads
	Diffuse Light: 40 Bright White LEDs
Color Temperature	5000K~5500K
Adjustment Method	Separate Control (Independently Controlled By One Knob For One Kind Of Light)

### Seven-color LED Parameters

Power	<3W
Input Voltage	DC 5V
Dimming Method	0-100% Linear Adjustment
Comprehensive Magnification	Red: 610um
	Yellow: 600um
	Warm White: 586um
	Green: 528um
	White: 494um
	Purple: 458um
	Blue: 470um
Adjustment Method	Brightness And Light Switching Are Controlled By Different Knobs

### Software Environment

Windows System Demand	Microsoft ® Windows ® XP / 7 / 8 / 8.1/10(32 & 64 bit)
	CPU: Dual-core 3.0 GHz Or More CPU
	Memory: 4G Or More
	Network:10/100/1000Mbps Compatitable Interface
	At Least 10 GB Available Hard Disk Space

### Operating Environment

Operating Temperature	0°C~ 40°C
Storage Temperature	-20°C~ 60°C
Operating Humidity	30~60%RH
Storage Humidity	10~80%RH



# A19.0209-40

## Phase Contrast Microscope, Achromatic Phase Contrast 40x

**OPTO-EDU**



Telescope 10x



Phase Contrast Slide 40x



Achromatic Phase Contrast Objectives 40x



Phase Contrast Condenser



Sliding Binocular Head 30° Inclined, 360° Rotatable  
Achromatic 4x, 10x, 100x, Achromatic Phase Contrast 40x Objective  
Double Layer Mechanical Stage, 140\*140mm, Moving Range 50\*75mm  
Phase Contrast Slide For 40x, Phase Contrast Condenser, Centering Telescope 10x  
Built-in Illumination 6V20W Halogen Lamp, 100~240V

### A19.0209-40 Phase Contrast Microscope

Magnification	40x~1000x
Head	Sliding Binocular Head, 30° Inclined, Interpupillary Distance 55~75mm, Left Eyepiece Tube Diopter Adjustable +/-5°
Eyepiece	Wide Field WF10x/18mm
Nosepiece	Backward Quadruple Nosepiece
Objective	Achromatic 4x/0.10, 10x/0.25, 100x/1.25(Oil)
Stage	Double Layer Mechanical Stage, 140*140mm, Moving Range 50*75mm
Focusing	Coaxial Coarse & Fine Focusing. Fine Focusing Scale 0.002mm, Coarse Focusing Stroke 37.7mm/Rotation, With Tension Adjustment, With Up Limit, Base Bearing Black Plastic Cap
Condenser	N.A.1.25 Abbe Condenser, Iris Diaphragm, With Filter Holder
Filter	Blue, Yellow, Green
Phase Contrast	Phase Contrast Objective 40x
	Phase Contrast Slide 40x
	Phase Contrast Condenser
	Centering Telescope 10x
Light Source	Built-in Illumination 6V20W Halogen Lamp, 100~240V

# A19.0214

## Phase Contrast Microscope, Achromatic Turret Phase Contrast

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Sedentopf Trinocular Head 30° Inclined 360° Rotatable  
Achromatic Phase Contrast Objective 10x20x40x100x  
Turret Disc Phase Contrast Condenser, Centering Telescope  
Large Size Double Layer Mechanical Stage 160x140mm/75x50mm  
6V20W Halogen Lamp Kohler Illumination

A19.0214 Phase Contrast Microscope	
Head	Seidentopf Trinocular Head, Inclination 30°, Rotatable 360°
Eyepiece	WF10x/18mm
Nosepiece	Backward Quadruple Nosepiece, Ball Bearing Inner Locating
Phase Contrast Set	Phase Contrast Achromatic Objective:
	10x/0.25 PHP
	20x/0.40 PHP
	40x/0.65 PHP(Spring)
	100x/1.25 PHP (Spring,Oil)
	Centering Telescope
	Turnplate Phase Contrast Condenser
Working Stage	Double Layer Mechanical 160x140mm, Moving Range 75x50mm
Focusing	Coaxial Coarse & Fine Focus System, Fine Focus Minimum Division 0.002mm, Tension Adjustable, With Up Stop
Condenser	Abbe N.A.1.25, Rack & Pinion Height Adjustment
Filter	Blue, Green, Yellow Filter
Light Source	Kholer Illumination 6V 20W Halogen Lamp, Brightness Adjustable, With Collector For Halogen Lamp

# A19.0911

## Phase Contrast Microscope

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Infinity Chromatic Aberration Correction System, Bright Field & Phase Contrast  
 Infinity Plan Phase Contrast Objective 10x20x40x100x & Centering Telescope 10x  
 Turret Phase Contrast Condenser, For 10x20x40x100x Phase Contrast  
 Double Layer Mechanical Stage 150x162mm /76x50mm  
 LCD Information Screen On Base For Color Temperature Adjust & Brightness Memory Function

### A19.0911 Phase Contrast Microscope

Optical System	Infinity Chromatic Aberration Correction System
Head	Binocular, 360° Rotation, Interpupillary Distance 50-75mm
	Trinocular, Light Split 8:2, 360° Rotation, Interpupillary Distance 50-75mm
Eyepiece	WF10x/20mm Wide Field Eyepiece, Centered yepiece (Φ30mm)
Nosepiece	5 Holes Nosepiece
Objective	Infinity Plan Achromatic 10x Phase Contrast Objective 10x20x40x100x
Working Stage	Double Layer Mechanical Stage 150mmx162mm
Condenser	N.A. 1.25 Koehler Illuminator DISC Phase Contrast Condenser Group, For 10X, 20X, 40X, 100X Phase Contrast Observation
Light Source	3W LED, With LCD Screen, Adjustable Color Temperature (3000K-5600K), Brightness Memory Function
Power	Wide Range 100V -240V



# A19.1008

## Phase Contrast Microscope

**OPTO-EDU**



Classical 107BN Phase Contrast Biological Microscope  
 Phase Contrast Objective 40x, Phase Contrast Slide 40x  
 Telescope 10x, Phase Contrast Condenser  
 High Quality Optical System Bring Clear & Sharp Image  
 Large Size Mechanical Stage 140x140mm, Moving Range 50x75mm

Items	A19.1008-40 Phase Contrast Microscope	
Magnification	40x~1000x	
Head	Sliding Binocular Head, 45° Inclined	
Eyepiece	Wide Field WF10x/18mm	
Nosepiece	Quadruple Nosepiece	
Objective	Achromatic 4x/0.10, 10x/0.25, 100xs/1.25(Oil)	
Stage	Double Layer Mechanical Stage, 140*140mm, Moving Range 50*75mm	
Focusing	Coaxial Coarse & Fine Focusing. Fine Focusing Scale 0.002mm, Coarse Focusing Stroke 37.7mm/Rotation, With Tension Adjustment, With Up Limit	
Condenser	N.A.1.25 Abbe Condenser, Iris Diaphragm, With Filter Holder	
Filter	Blue, Yellow, Green	
Phase Contrast	Phase Contrast Objective 40x	
	Phase Contrast Diaphragm 40x	
	Abbe Condenser N.A.1.25	
	Centering Telescope 10x	
Illumination	Plan-Concave Mirror	
	Built-in Illumination 6V20W Halogen Lamp, 100~240V	

### A19.1008-40 Phase Contrast Microscope Optional Accessory

Head	Sliding Trinocular Head, 45° Inclined, Anti-Mould System	A53.1004-5LTB
	Seidentopf Binocular Head, 30° Inclined, Anti-Mould System	A53.1003-5LAS
	Seidentopf Trinocular Head, 30° Inclined, Anti-Mould System	A53.1004-5LTS
Eyepiece	Wide Field Eyepiece P16x/11mm	A51.1002-16
Nosepiece	Quintuple Nosepiece	A54.1001-5M

# A10.0202

## Dark Field Microscope, 12V50W Halogen Lamp

**OPTO-EDU**



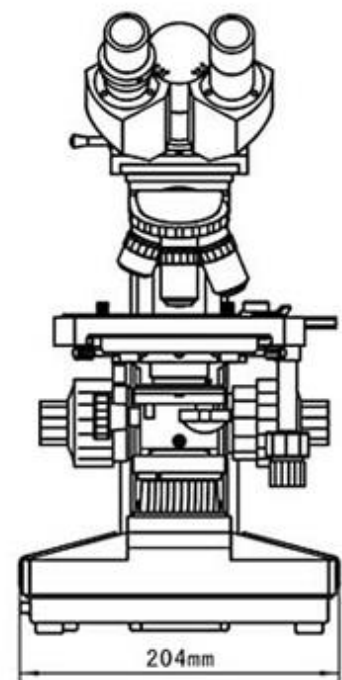
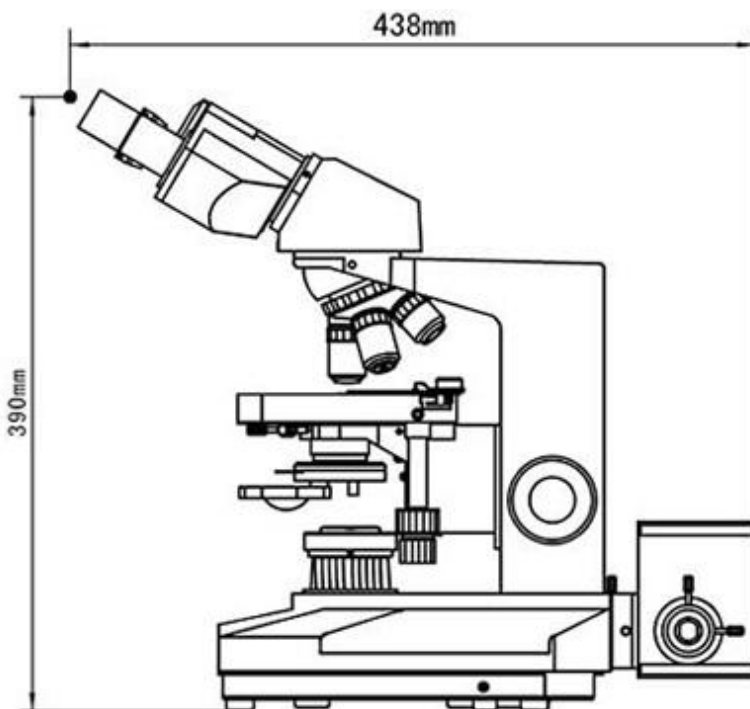
Dark Field Condenser  
Dry N.A. 0.77~0.91

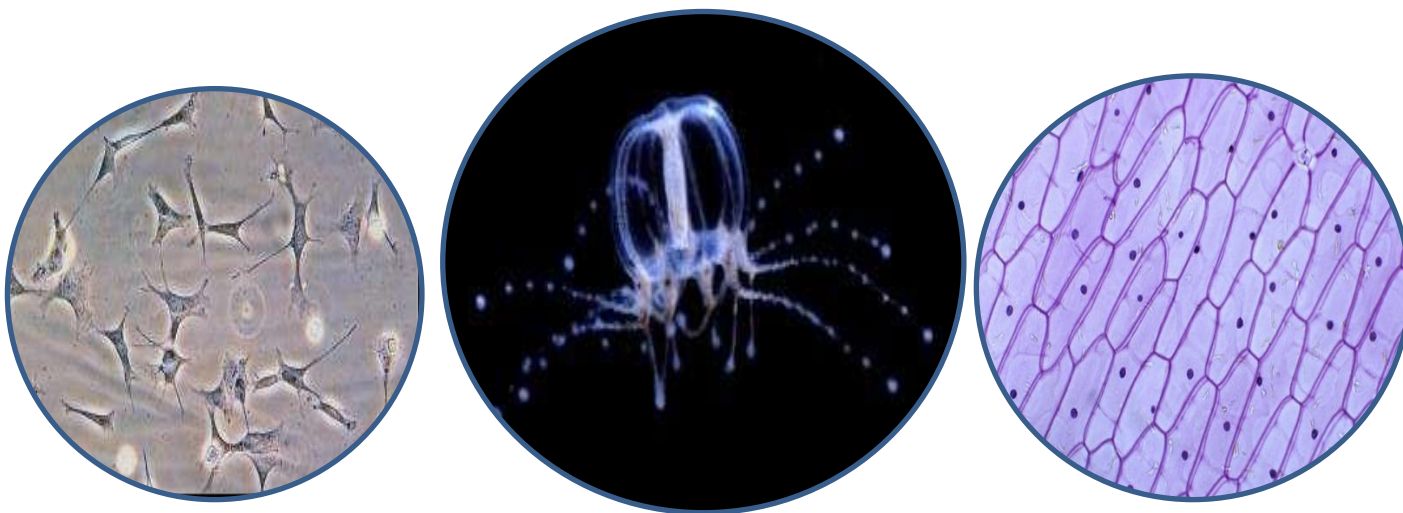


Dark Field Condenser  
Immersion N.A. 1.25~1.40



Trinocular Head Light Split Switch E100:P0/E0:P100 With WF10x/20mm Eyepiece  
Quintuple Nosepiece With Plan Achromatic Objective 4x,10x,20x,40x,100x  
Dark Field Condenser Dry 0.77~0.91 For 20x or Lower Power Objective  
Dark Field Condenser Immersion 1.25~1.40 For 40x or Higher Power Objective  
12V50W High Brightness Halogen Light Source Special For Dark Field View





## Product Specification

A10.0202 Dark Field Microscope, 12V50W Halogen Lamp		
Head	Binocular Head, 30° Inclined, Interpapillary Distance 55~75mm, Left Eyepiece Tube Diopter Adjustable +/-5°, 100% Light Pass To Photo Tube	
Eyepiece	WF10x/20mm Wide Field Eyepiece	
Nosepiece	Backward Quintuple Nosepiece, Ball Bearing Inner Locating	
Objective	Plan Achromatic Objective:	
	PL4x/0.10, W.D.21mm	
	PL10x/0.25, W.D. 5.0mm	
	PL20x/0.40, W.D.8.8mm	
	PL40x/0.65, W.D. 0.66mm (S)	
	PL100x/1.25, W.D.0.36mm (S,O)	
Working Stage	Double Layer Mechanical Stage 160*140mm, Moving Range 75*50mm	
Focusing	Coaxial Coarse & Fine Focus Knob, With Tension Adjustable And Limit Stopper, Minimum Division 0.002mm	
Condenser	Abbe Condenser N.A.1.25, Rack & Pinion Height Adjustable	
Filter	Blue Filter, Frosted Filter	
Dark Field Condenser	Dry, N.A.1.25~1.40	A5D.0210-D
	Immersion, N.A.0.71~0.99	A5D.0210-I
Light Source	12V50W Halogen Lamp, Brightness Adjustable, External Power Supply Box, Light Collector With Iris Diaphragm	

## Optional Accessories

A10.0202 Dark Field Microscope Optional Accessories		
Eyepiece	WF16x/11mm Wide Field Eyepiece	A51.0203-1A
	Retical Eyepiece, WF10x/20mm, Micrometer Div 0.1mm	A51.0205-10
Objective	Plan Achromatic Objective PL60x/0.85, W.D.0.25mm	A52.0203-60
Filter	Green Filter	A56.0209-02
	Yellow Filter	A56.0209-03
Polarizing	Simple Polarizing Set	
	Polarizer, 360° Rotatable, Used On Base Light Collector	A5P.0201-1
	Analyzer Glass, Put Between Head And Body	
Adapter	CCD Adapter 0.4x	A55.0202-01
	CCD Adapter 0.5x	A55.0202-04
	CCD Adapter 1.0x	A55.0202-02
	CCD Adapter 0.5x With Dividing 0.1mm/Divv	A55.0202-03
	Digital SLR Camera Adapter for Canon EF Series	A55.0204-02



# A10.1007

## Dark Field Microscope

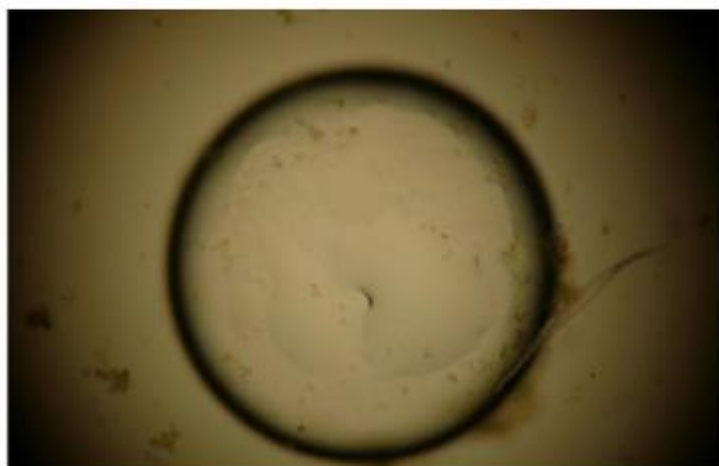
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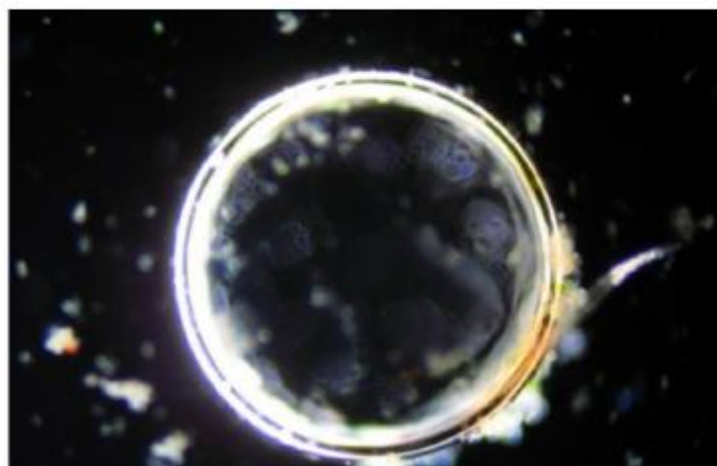
Total Magnification 40x-1000x With Special Dark Field Attachment  
Dry Dark Field Condenser N.A.0.7~0.9  
Immersion Dark Field Condenser N.A.1.25-1.36  
Dark Field Objective Achromatic 100x, With Cone Diaphragm  
Dark Field Objective Plan 100x, With Iris Diaphragm

### Bright Field & Dark Field Contrast

Eyepiece 10x, Objective 40x, Bright Field



Eyepiece 10x, Objective 40x, Dark Field



# Product Specification

<b>A10.1007 Professional Dark Field Microscope</b>		
Magnification	40x~1000x	
Head	Sliding Trinocular Head, 45° Inclined, With C-Mount 0.45x	
Eyepiece	Wide Field WF10x/18mm	
Nosepiece	Quadruple Nosepiece	
Objective	Achromatic 4x/0.10, 10x/0.25, 40xs/0.65, 100xs/1.25(Oil)	
Stage	Double Layer Mechanical Stage, 140*140mm, Moving Range 50*75mm	
Focusing	Low Position Coaxial Coarse & Fine Focusing. Fine Focusing Scale 0.002mm, With Tension Adjustment, With Up Limit	
Condenser	NA1.25 Bright Field Condenser with Iris Diaphragm	
Dark Field	Dark Field Condenser, N.A. 0.7~0.9, Dry	
	Dark Field Condenser, N.A. 1.25~1.35, Immersion	
	Achromatic Dark Field Objective 100x, With Cone Diaphragm	
	Plan Dark Field Objective 100X, With Iris Diaphragm	
Filter	Blue, Yellow, Green	
Light Source	Built-in Illumination 6V20W Halogen Lamp	
Adapter	C-Mount 0.45x	
<b>A10.1007 Dark Field Microscope Optional Accessories</b>		
Adapter	Photo Adapter, For Nikon or Cannon SLR Camera, 1.0x	A55.1001
	C-Mount 1.0x	A55.1002-10
Eyepiece	P16x/11mm	A51.1002-16

# A10.1018

## Professional Dark Field Microscope

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A5D.1030-04

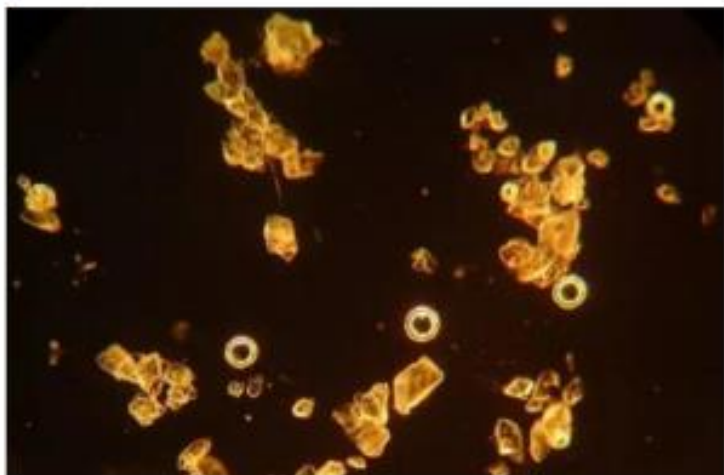
### Dark Field Objective With Iris Diaphragm Inside

Infinity Plan 100x(Oil), Used With Immersion Dark Field Condenser, For Professional Dark Field Observation

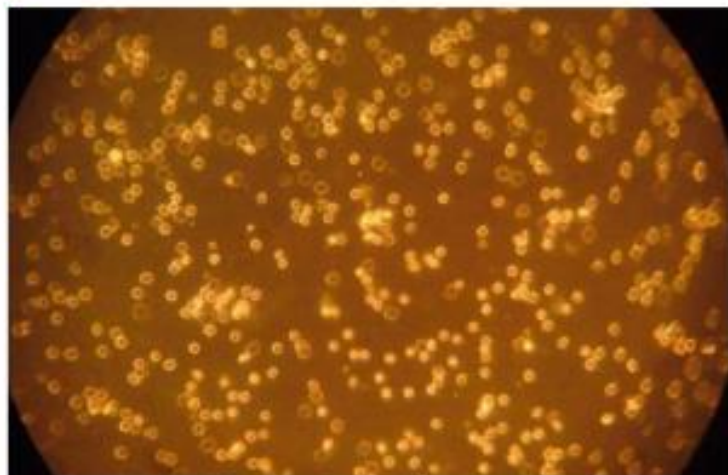


Infinity Plan Objective 4x10x40x60x100x  
Halogen 24V100W, Kohler Illumination  
Immersion Dark Field Condenser N.A.1.25~1.36  
Dry Dark Field Condenser N.A.0.7~0.9  
Infinite Plan Dark Field Objective 100X With Iris Diaphragm

### ■ Sand and bubbles



### ■ Red Blood Cell





# Product Specification

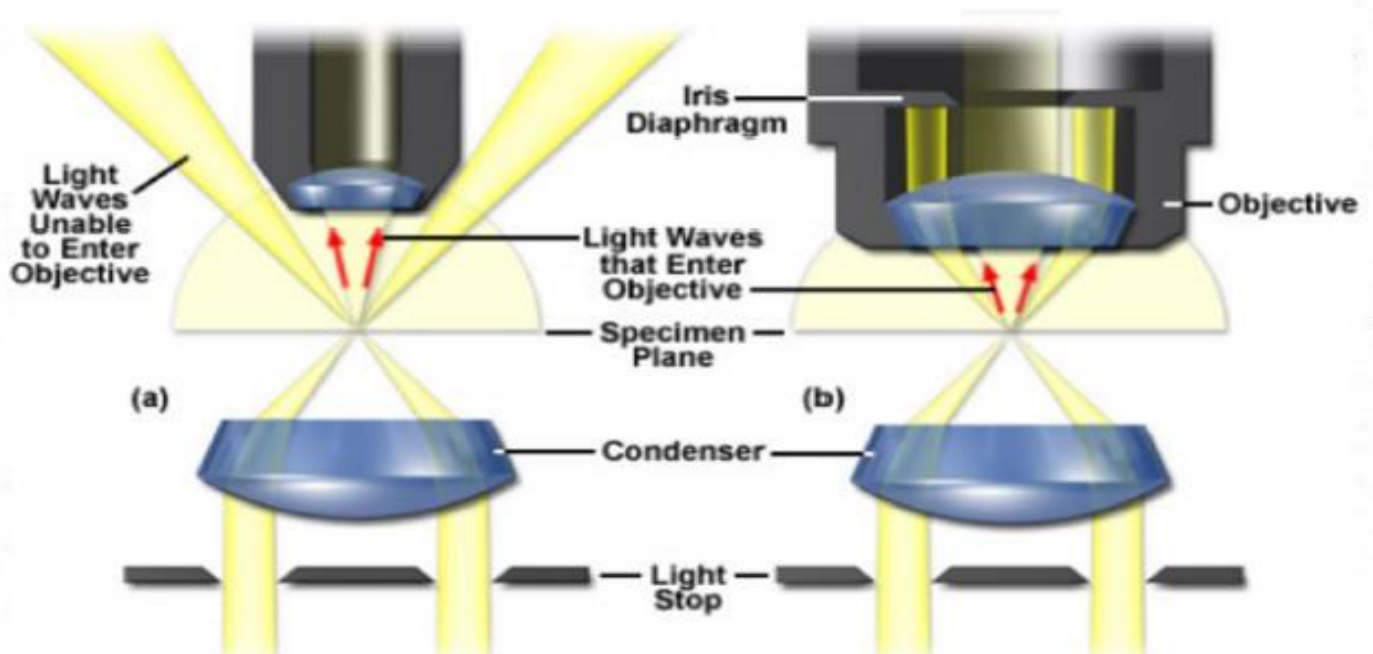
## A10.1018 Dark Field Laboratory Biological Microscope

Optical System	Infinity Plan Optical System	
Head	Seidentopf Trinocular Head, 30° Inclined, 360° Rotatable, Interpupillary 48~75mm, Left Eyepiece Tube Diopter Adjustable	
Eyepiece	Extra Wide Field Eyepiece EW10x/22mm, Eyepiece Tube Dia.30mm	
Nosepiece	Backward Quintuple Nosepiece, With Slide Slot	
Objective	Infinity Plan Achromatic Objective 4x, 10x, 40x, 100x	
Focusing	Coaxial Coarse & Fine Adjustment, Focusing Range 24mm, Fine Division 0.001mm, Coarse Stroke 37.7mm	
Working Stage	Double Layer Mechanical Stage, 185*142mm, Moving Range 55*75mm	
Condenser	Swing Out Condenser N.A.0.9/0.25	
Illumination	Halogen Lamp 6V30W, External Kohler Illumination, With Aspherical Collector, Brightness Adjustable	
Filter	Green, Blue	
Dark Field	Dark Field Condenser, N.A. 0.7~0.9, Dry, Use With 40x Or Lower Magnification Objective	A5D.1010-D
Adapter	Trinocular Adapter + Eyepiece Tube Photo Adapter Dia.23.2mm	

### Optional Accessories

Head	Seidentopf Binocular Head, 30° Inclined, Interpupillary 48~75mm	A53.1003-7
	Upgrade to Tilting Binocular Head 5°~35°	A53.1005-3
	Upgrade to Tilting Trinocular Head 5°~35°	A53.1005-4
Eyepiece	Extra Wide Field Eyepiece EW10x/20mm, Eyepiece Tube Dia.30mm	A51.1003-1020
	Extra Wide Field Eyepiece EW20x/12mm, Eyepiece Tube Dia.30mm	A51.1003-2012
	Extra Wide Field Eyepiece EW15x/16mm, Eyepiece Tube Dia.30mm	A51.1003-1516
Objective	Infinity Plan Achromatic Objective 20x	A52.1006-20
	Infinity Plan Achromatic Objective 60x	A52.1006-60
Nosepiece	Sextuple Nosepiece	A54.1001-6
Dark Field	Dark Field Condenser, N.A. 1.25~1.36, Immersion, Use With 100x Objective	A5D.1010-I
	Dark Field Objective, Infinity Plan 100x(Oil)	A5D.1030-3
	Dark Field Objective, Infinity Plan 100x(Oil), With Iris Diaphragm	A5D.1030-4
Illumination	Upgrade To Halogen Lamp 24V50W, For Better Dark View	A56.1018-50W
	Upgrade To Halogen Lamp 24V100W, For Better Dark View	A56.1018-100W
Adapter	0.45x C-Mount	A55.1002-45

## Dark Field Microscope Light Path And Observation Case



# A12.1061

## Laboratory Microscope

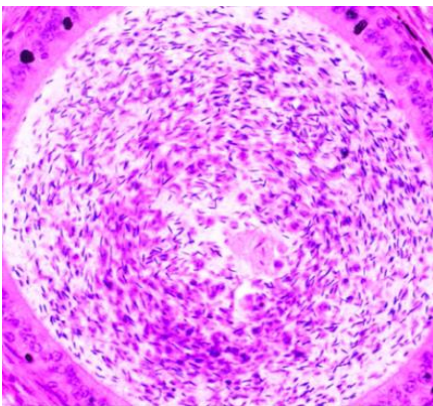
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Creative Water  
Immersion Objective 100x

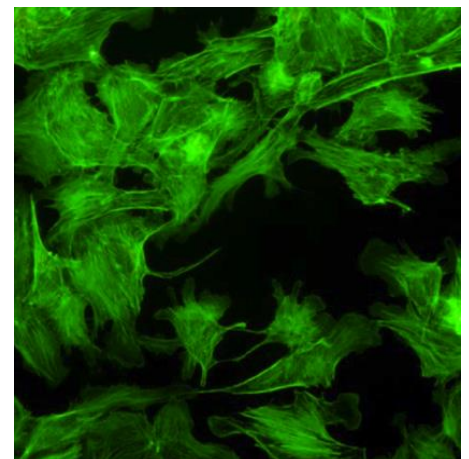


Brand New Design 2019 For High Level Laboratory Research!  
ECO Function Extra Wide Eyepiece 10x/22mm Diopter Adjustable  
Large Rackless Safty Working Stage 230x150mm, Moving Range 78x54mm  
Infinity Plan NIS60 Objective 4x10x40x100x, Water 100x Immersion Available  
Upgradeable To Dark Field, Polarizing, Phase Contrast & Fluorescent Function



Bright Field  
Dark Field  
Phase Contrast  
Simple Polarizing  
Observation  
Combined

Can Upgradeable  
To Fluorescence  
Microscope  
**A16.1062**



# Product Specification

A12.1061, A12.1602 Laboratory Biological Microscope, A16.1062 LED Fluorescent Microscope		A12.1061		A12.1062		A16.1062		Cata. No.
		-B	-T	-B	-T	-B	-T	
Optical System	NIS Infinite Optical System	●	●	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	●	●	
	Dark Field	○	○	○	○	○	○	
	Phase Contrast	-	-	○	○	○	○	
	Epi-Fluorescence	-	-	○	○	●	●	
	Polarizing	○	○	○	○	○	○	
Head	Seidentopf Binocular Head, Inclined At 30°, Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm	●		●		●		A53.1061-B
	Seidentopf Trinocular Head, Inclined At 30°, Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm, Light Path Fixed 50:50		●		●		●	A53.1061-T
	Seidentopf Trinocular Head, Inclined At 30°, Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm, Light Path Switchable 0:100/100:0	○	○	○	○	○	○	A53.1061-TS
	Tilting Binocular Head, Inclined 5°~35°, Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm	○	○	○	○	○	○	A53.1061-BS
	Digital Head, Built-in Digital Camera 5.0M, Support Android, IOS, Windows, Output Image By WIFI In Real Time Upgrade to <a href="#">A31.1062-5.0M</a>	○	○	○	○	○	○	A53.1061-5.0M
	Digital Head, Built-in Wireless Digital Camera 5.0M, Support Android, IOS, Windows, Output Image By WIFI In Real Time, App Software, By Scanning QR Code On Microscope, Installing App & Identifying Microscope, You Can View Micro Image On Mobile Phone & Tablet. Upgrade to <a href="#">A31.1062-5.0W</a>	-	-	○	○	-	-	A53.1061-5.0W
Eyepiece	EW15x/16mm, Diopter Adjustable, Dia.30mm	○	○	○	○	○	○	A51.1029-1516
	EW20x/12mm, Diopter Adjustable, Dia.30mm	○	○	○	○	○	○	A51.1029-2012
Nosepiece	Quintuple Nosepiece, Dovetail Interface	●	●	-	-	-	-	
	Coded Quintuple Nosepiece, Dovetail Interface	-	-	●	●	●	●	
NIS45 Infinity Plan Objective	4x/0.10, W.D.20.6mm	●	●	-	-	-	-	A52.1045-4
	10x/0.25, W.D.17.9mm	●	●	-	-	-	-	A52.1045-10
	20x/0.40, W.D.6.40mm	○	○	-	-	-	-	A52.1045-20
	40x/0.60, W.D.1.50mm	●	●	-	-	-	-	A52.1045-40
	60x/0.80, W.D.0.30mm	○	○	-	-	-	-	A52.1045-60
	100x/1.25(Oil), W.D.0.16mm	●	●	-	-	-	-	A52.1045-100
	100x/1.10(Water), W.D.0.16mm	○	○	-	-	-	-	A52.1045-100W



NIS60 Infinity Plan Objective	4x/0.10, W.D.30.0mm	-	-	●	●	●	●	A52.1060-4
	10x/0.25, W.D.10.2mm	-	-	●	●	●	●	A52.1060-10
	20x/0.40, W.D.4.8mm	-	-	○	○	○	○	A52.1060-20
	40x/0.65, W.D.1.5mm	-	-	●	●	●	●	A52.1060-40
	60x/0.80, W.D.0.30mm	-	-	○	○	○	○	A52.1060-60
	100x/1.25(Oil), W.D.0.3mm	-	-	●	●	●	●	A52.1060-100
	100x/1.10(Water), W.D.0.2mm	-	-	○	○	○	○	A52.1060-100W
NIS60 Infinity Plan Phase Contrast Objective	10x/0.25, W.D.10.2mm	-	-	○	○	○	○	A5C.1060-10
	20x/0.40, W.D.12.0mm	-	-	○	○	○	○	A5C.1060-20
	40x/0.65, W.D.0.7mm	-	-	○	○	○	○	A5C.1060-40
	100x/1.25(Oil), W.D.0.2mm	-	-	○	○	○	○	A5C.1060-100
Focusing	Coaxial Coarse & Fine Adjustment, Tension Adjustable, Fine Division 0.002mm, Coarse Focusing Range 28mm	●	●	●	●	●	●	
Working Stage	Double Layer Mechanical Rackless Stage, Size 230x150mm, Moving Range 78x54mm	●	●	-	-	-	-	
	Double Layer Mechanical Rackless Stage, Size 230x150mm, Moving Range 78x54mm, Anti-Scratch Hard Coating Dural Platform	-	-	●	●	●	●	
Condenser	Inserted Abbe Condenser N.A. 1.25, With Slot For Phase Contrast Slide And Dark Field Slide.	●	●	●	●	●	●	
Illumination	1W S-LED Critical Illumination	●	●	-	-	-	-	
	3W S-LED Kohler Illumination	-	-	●	●	●	●	
	Green Filter	●	●	●	●	●	●	
Dark Field	Dark Field Slide	○	○	○	○	○	○	A5D.1062
Polarizing	Simple Polarizing Set	○	○	○	○	○	○	A5P.1008
Phase Contrast	Phase Slider For 10x-40x	○	○	○	○	○	○	A5C.1062-S1040
	Phase Slider For 100x	○	○	○	○	○	○	A5C.1062-S100
Epi- Fluorescence Attachment	3W LED Epi-Fluorescence Attachment, Fly-Eye Lens Illumination, With 2 Filter Position + Bright Field Position, Switch Quickly, With Attachable UV Shield, B, G Filters	○	○	○	○	●	●	A5F.1062
	Filter U	○	○	○	○	○	○	A5F.1062-U
	Filter V	○	○	○	○	○	○	A5F.1062-V
Photo Adapter	1.0x C-Mount	○	○	○	○	○	○	A55.1062-1.0
	0.5x C-Mount	○	○	○	○	○	○	A55.1062-0.5
Power Supply	AC 100-240V,50/60Hz	●	●	●	●	●	●	
	USB Charging Port, Support To Use Exeternal Rechargeable Battery Power Bank Like Mobile Phone Out Door Freely	●	●	●	●	●	●	
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, Set Power Off Timer 5 Mins to 8 Hours, And So On.	-	-	●	●	●	●	
Dimensions	220(W)x290(D)x472(H) mm	●	●	●	●	●	●	

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

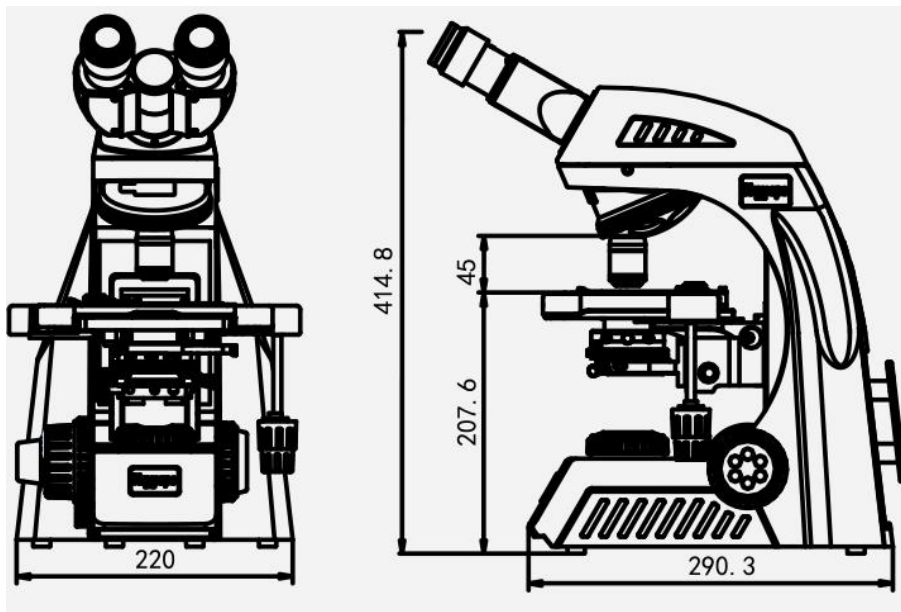
# A12.1062

## Laboratory Microscope

OPTO-EDU



Brand New Design 2019 High Level Laboratory Research Microscope  
Coding Quintuple Nosepiece LCD Screen Base With Brightness Memory Function  
Large Rackless Safty Working Stage 230x150mm, Moving Range 78x54mm  
Infinity Plan NIS60 Objective 4x10x40x100x, Water 100x Immersion Available  
Upgradeable To Dark Field, Polarizing, Phase Contrast & Fluorescent Function



# Product Specification

A12.1061, A12.1602 Laboratory Biological Microscope, A16.1062 LED Fluorescent Microscope		A12.1061		A12.1062		A16.1062		Cata. No.
		-B	-T	-B	-T	-B	-T	
Optical System	NIS Infinite Optical System	●	●	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	●	●	
	Dark Field	○	○	○	○	○	○	
	Phase Contrast	-	-	○	○	○	○	
	Epi-Fluorescence	-	-	○	○	●	●	
	Polarizing	○	○	○	○	○	○	
Head	Seidentopf Binocular Head, Inclined At 30° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm	●		●		●		A53.1061-B
	Seidentopf Trinocular Head, Inclined At 30° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm, Light Path Fixed 50:50		●		●		●	A53.1061-T
	Seidentopf Trinocular Head, Inclined At 30° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm, Light Path Switchable 0:100/100:0	○	○	○	○	○	○	A53.1061-TS
	Tilting Binocular Head, Inclined 5°~35° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm	○	○	○	○	○	○	A53.1061-BS
	Digital Head, Built-in Digital Camera 5.0M, Support Android, IOS, Windows, Output Image By WIFI In Real Time Upgrade to <a href="#">A31.1062-5.0M</a>	○	○	○	○	○	○	A53.1061-5.0M
	Digital Head, Built-in Wireless Digital Camera 5.0M, Support Android, IOS, Windows, Output Image By WIFI In Real Time, App Software, By Scanning QR Code On Microscope, Installing App & Identifying Microscope, You Can View Micro Image On Mobile Phone & Tablet. Upgrade to <a href="#">A31.1062-5.0W</a>	-	-	○	○	-	-	A53.1061-5.0W
Eyepiece	EW10x/22mm, Diopter Adjustable, Dia.30mm	●	●	●	●	●	●	A51.1029-1022
	EW15x/16mm, Diopter Adjustable, Dia.30mm	○	○	○	○	○	○	A51.1029-1516
	EW20x/12mm, Diopter Adjustable, Dia.30mm	○	○	○	○	○	○	A51.1029-2012
Nosepiece	Quintuple Nosepiece, Dovetail Interface	●	●	-	-	-	-	
	Coded Quintuple Nosepiece, Dovetail Interface	-	-	●	●	●	●	
NIS45 Infinity Plan Objective	4x/0.10, W.D.20.6mm	●	●	-	-	-	-	A52.1045-4
	10x/0.25, W.D.17.9mm	●	●	-	-	-	-	A52.1045-10
	20x/0.40, W.D.6.40mm	○	○	-	-	-	-	A52.1045-20
	40x/0.60, W.D.1.50mm	●	●	-	-	-	-	A52.1045-40
	60x/0.80, W.D.0.30mm	○	○	-	-	-	-	A52.1045-60
	100x/1.25(Oil), W.D.0.16mm	●	●	-	-	-	-	A52.1045-100
	100x/1.10(Water), W.D.0.16mm	○	○	-	-	-	-	A52.1045-100W



NIS60 Infinity Plan Objective	4x/0.10, W.D.30.0mm	-	-	●	●	●	●	A52.1060-4
	10x/0.25, W.D.10.2mm	-	-	●	●	●	●	A52.1060-10
	20x/0.40, W.D.4.8mm	-	-	○	○	○	○	A52.1060-20
	40x/0.65, W.D.1.5mm	-	-	●	●	●	●	A52.1060-40
	60x/0.80, W.D.0.30mm	-	-	○	○	○	○	A52.1060-60
	100x/1.25(Oil), W.D.0.3mm	-	-	●	●	●	●	A52.1060-100
	100x/1.10(Water), W.D.0.2mm	-	-	○	○	○	○	A52.1060-100W
NIS60 Infinity Plan Phase Contrast Objective	10x/0.25, W.D.10.2mm	-	-	○	○	○	○	A5C.1060-10
	20x/0.40, W.D.12.0mm	-	-	○	○	○	○	A5C.1060-20
	40x/0.65, W.D.0.7mm	-	-	○	○	○	○	A5C.1060-40
	100x/1.25(Oil), W.D.0.2mm	-	-	○	○	○	○	A5C.1060-100
Focusing	Coaxial Coarse & Fine Adjustment, Tension Adjustable, Fine Division 0.002mm, Coarse Focusing Range 28mm	●	●	●	●	●	●	
Working Stage	Double Layer Mechanical Rackless Stage, Size 230x150mm, Moving Range 78x54mm	●	●	-	-	-	-	
	Double Layer Mechanical Rackless Stage, Size 230x150mm, Moving Range 78x54mm, Anti-Scratch Hard Coating Dural Platform	-	-	●	●	●	●	
Condenser	Inserted Abbe Condenser N.A. 1.25, With Slot For Phase Contrast Slide And Dark Field Slide.	●	●	●	●	●	●	
Illumination	1W S-LED Critical Illumination	●	●	-	-	-	-	
	3W S-LED Kohler Illumination	-	-	●	●	●	●	
	Green Filter	●	●	●	●	●	●	
Dark Field	Dark Field Slide	○	○	○	○	○	○	A5D.1062
Polarizing	Simple Polarizing Set	○	○	○	○	○	○	A5P.1008
Phase Contrast	Phase Slider For 10x-40x	○	○	○	○	○	○	A5C.1062-S1040
	Phase Slider For 100x	○	○	○	○	○	○	A5C.1062-S100
Epi- Fluorescence Attachment	3W LED Epi-Fluorescence Attachment, Fly-Eye Lens Illumination, With 2 Filter Position + Bright Field Position, Switch Quickly, With Attachable UV Shield, B, G Filters	○	○	○	○	●	●	A5F.1062
	Filter U	○	○	○	○	○	○	A5F.1062-U
	Filter V	○	○	○	○	○	○	A5F.1062-V
Photo Adapter	1.0x C-Mount	○	○	○	○	○	○	A55.1062-1.0
	0.5x C-Mount	○	○	○	○	○	○	A55.1062-0.5
Power Supply	AC 100-240V,50/60Hz	●	●	●	●	●	●	
	USB Charging Port, Support To Use Exeternal Rechargeable Battery Power Bank Like Mobile Phone Out Door Freely	●	●	●	●	●	●	
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, Set Power Off Timer 5 Mins to 8 Hours, And So On.	-	-	●	●	●	●	
Dimensions	220(W)x290(D)x472(H) mm	●	●	●	●	●	●	

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

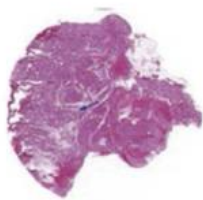
# A16.1062

## LED Fluorescent Microscope, B,G

**OPTO-EDU**



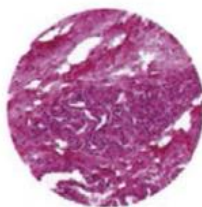
Brand New Design 2019 For High Level Laboratory Research!  
Coding Quintuple Nosepiece LCD Screen Base With Brightness Memory Function  
Large Rackless Safty Working Stage 230x150mm, Moving Range 78x54mm  
Infinity Plan NIS60 Objective 4x10x40x100x, Water 100x Immersion Available  
3W LED Epi-Fluorescence Attachment, Fly-Eye Lens Illumination, B,G Filters



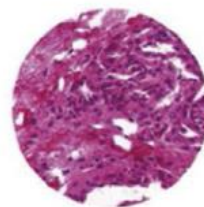
4x



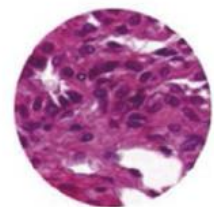
10x



20x



40x



100x

### **Coded Nosepiece (Available In A12.1062 Series)**

It Can Memorize The Illumination Brightness When Using Each Objective. When Different Objectives Are Converted To Each Other, The Light Intensity Is Automatically Adjusted To Reduce Visual Fatigue And Improve Work Efficiency.

# Product Specification

A12.1061, A12.1602 Laboratory Biological Microscope, A16.1062 LED Fluorescent Microscope		A12.1061		A12.1062		A16.1062		Cata. No.
		-B	-T	-B	-T	-B	-T	
Optical System	NIS Infinite Optical System	●	●	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	●	●	
	Dark Field	○	○	○	○	○	○	
	Phase Contrast	-	-	○	○	○	○	
	Epi-Fluorescence	-	-	○	○	●	●	
	Polarizing	○	○	○	○	○	○	
Head	Seidentopf Binocular Head, Inclined At 30° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm	●		●		●		A53.1061-B
	Seidentopf Trinocular Head, Inclined At 30° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm, Light Path Fixed 50:50		●		●		●	A53.1061-T
	Seidentopf Trinocular Head, Inclined At 30° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm, Light Path Switchable 0:100/100:0	○	○	○	○	○	○	A53.1061-TS
	Tilting Binocular Head, Inclined 5°~35° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm	○	○	○	○	○	○	A53.1061-BS
	Digital Head, Built-in Digital Camera 5.0M, Support Android, IOS, Windows, Output Image By WIFI In Real Time Upgrade to <a href="#">A31.1062-5.0M</a>	○	○	○	○	○	○	A53.1061-5.0M
	Digital Head, Built-in Wireless Digital Camera 5.0M, Support Android, IOS, Windows, Output Image By WIFI In Real Time, App Software, By Scanning QR Code On Microscope, Installing App & Identifying Microscope, You Can View Micro Image On Mobile Phone & Tablet. Upgrade to <a href="#">A31.1062-5.0W</a>	-	-	○	○	-	-	A53.1061-5.0W
Eyepiece	EW10x/22mm, Diopter Adjustable, Dia.30mm	●	●	●	●	●	●	A51.1029-1022
	EW15x/16mm, Diopter Adjustable, Dia.30mm	○	○	○	○	○	○	A51.1029-1516
	EW20x/12mm, Diopter Adjustable, Dia.30mm	○	○	○	○	○	○	A51.1029-2012
Nosepiece	Quintuple Nosepiece, Dovetail Interface	●	●	-	-	-	-	
	Coded Quintuple Nosepiece, Dovetail Interface	-	-	●	●	●	●	
NIS45 Infinity Plan Objective	4x/0.10, W.D.20.6mm	●	●	-	-	-	-	A52.1045-4
	10x/0.25, W.D.17.9mm	●	●	-	-	-	-	A52.1045-10
	20x/0.40, W.D.6.40mm	○	○	-	-	-	-	A52.1045-20
	40x/0.60, W.D.1.50mm	●	●	-	-	-	-	A52.1045-40
	60x/0.80, W.D.0.30mm	○	○	-	-	-	-	A52.1045-60
	100x/1.25(Oil), W.D.0.16mm	●	●	-	-	-	-	A52.1045-100
	100x/1.10(Water), W.D.0.16mm	○	○	-	-	-	-	A52.1045-100W



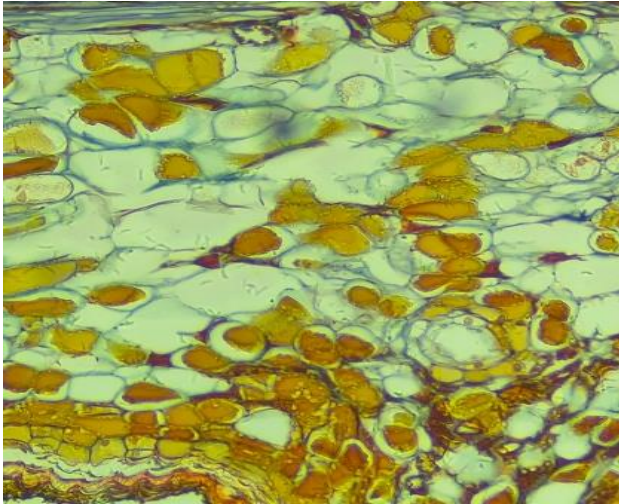
NIS60 Infinity Plan Objective	4x/0.10, W.D.30.0mm	-	-	●	●	●	●	A52.1060-4
	10x/0.25, W.D.10.2mm	-	-	●	●	●	●	A52.1060-10
	20x/0.40, W.D.4.8mm	-	-	○	○	○	○	A52.1060-20
	40x/0.65, W.D.1.5mm	-	-	●	●	●	●	A52.1060-40
	60x/0.80, W.D.0.30mm	-	-	○	○	○	○	A52.1060-60
	100x/1.25(Oil), W.D.0.3mm	-	-	●	●	●	●	A52.1060-100
	100x/1.10(Water), W.D.0.2mm	-	-	○	○	○	○	A52.1060-100W
NIS60 Infinity Plan Phase Contrast Objective	10x/0.25, W.D.10.2mm	-	-	○	○	○	○	A5C.1060-10
	20x/0.40, W.D.12.0mm	-	-	○	○	○	○	A5C.1060-20
	40x/0.65, W.D.0.7mm	-	-	○	○	○	○	A5C.1060-40
	100x/1.25(Oil), W.D.0.2mm	-	-	○	○	○	○	A5C.1060-100
Focusing	Coaxial Coarse & Fine Adjustment, Tension Adjustable, Fine Division 0.002mm, Coarse Focusing Range 28mm	●	●	●	●	●	●	
Working Stage	Double Layer Mechanical Rackless Stage, Size 230x150mm, Moving Range 78x54mm	●	●	-	-	-	-	
	Double Layer Mechanical Rackless Stage, Size 230x150mm, Moving Range 78x54mm, Anti-Scratch Hard Coating Dural Platform	-	-	●	●	●	●	
Condenser	Inserted Abbe Condenser N.A. 1.25, With Slot For Phase Contrast Slide And Dark Field Slide.	●	●	●	●	●	●	
Illumination	1W S-LED Critical Illumination	●	●	-	-	-	-	
	3W S-LED Kohler Illumination	-	-	●	●	●	●	
	Green Filter	●	●	●	●	●	●	
Dark Field	Dark Field Slide	○	○	○	○	○	○	A5D.1062
Polarizing	Simple Polarizing Set	○	○	○	○	○	○	A5P.1008
Phase Contrast	Phase Slider For 10x-40x	○	○	○	○	○	○	A5C.1062-S1040
	Phase Slider For 100x	○	○	○	○	○	○	A5C.1062-S100
Epi- Fluorescence Attachment	3W LED Epi-Fluorescence Attachment, Fly-Eye Lens Illumination, With 2 Filter Position + Bright Field Position, Switch Quickly, With Attachable UV Shield, B, G Filters	○	○	○	○	●	●	A5F.1062
	Filter U	○	○	○	○	○	○	A5F.1062-U
	Filter V	○	○	○	○	○	○	A5F.1062-V
Photo Adapter	1.0x C-Mount	○	○	○	○	○	○	A55.1062-1.0
	0.5x C-Mount	○	○	○	○	○	○	A55.1062-0.5
Power Supply	AC 100-240V,50/60Hz	●	●	●	●	●	●	
	USB Charging Port, Support To Use Exeternal Rechargeable Battery Power Bank Like Mobile Phone Out Door Freely	●	●	●	●	●	●	
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, Set Power Off Timer 5 Mins to 8 Hours, And So On.	-	-	●	●	●	●	
Dimensions	220(W)x290(D)x472(H) mm	●	●	●	●	●	●	

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

# A31.1062

## Digital WIFI Laboratory Microscope, 5.0M

**OPTO-EDU**



Brand New Design 5.0M WIFI + USB2.0 Digital Laboratory Research Microscope  
Coding Quintuple Nosepiece LCD Screen Base With Brightness Memory Function  
Large Rackless Safty Working Stage 230x150mm, Moving Range 78x54mm  
Infinity Plan NIS60 Objective 4x10x40x100x, Water 100x Immersion Available  
Upgradeable To Dark Field, Polarizing, Phase Contrast & Fluorescent Function



# Product Specification

A31.1062 Digital WIFI Laboratory Microscope, 5.0M		A31.1062		Cata. No.
		5.0M	5.0W	
Optical System	NIS Infinite Optical System	●	●	
Observation Method	Bright Field	●	●	
	Dark Field	○	○	
	Phase Contrast	○	○	
	Epi-Fluorescence	●	●	
	Polarizing	○	○	
Head	Seidentopf Binocular Head, Inclined At 30° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm	●		A53.1061-B
	Seidentopf Trinocular Head, Inclined At 30° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm, Light Path Fixed 50:50		●	A53.1061-T
	Seidentopf Trinocular Head, Inclined At 30° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm, Light Path Switchable 0:100/100:0	○	○	A53.1061-TS
	Tilting Binocular Head, Inclined 5°~35° , Interpupillary Distance 47-78mm, Eyepiece Tube Dia.30mm	○	○	A53.1061-BS
	Digital Head, Built-in Digital Camera 5.0M, Support Android, IOS, Windows, Output Image By WIFI In Real Time	●		A53.1061-5.0M
	Digital Head, Built-in Wireless Digital Camera 5.0M, Support Android, IOS, Windows, Output Image By WIFI In Real Time		●	A53.1061-5.0W
	App Software, By Scanning QR Code On Microscope, Installing App & Identifying Microscope, You Can View Micro Image On Mobile Phone & Tablet.	●	●	
Eyepiece	EW10x/22mm, Diopter Adjustable, Dia.30mm	●	●	A51.1029-1022
	EW15x/16mm, Diopter Adjustable, Dia.30mm	○	○	A51.1029-1516
	EW20x/12mm, Diopter Adjustable, Dia.30mm	○	○	A51.1029-2012
Nosepiece	Quintuple Nosepiece, Dovetail Interface	-	-	
	Coded Quintuple Nosepiece, Dovetail Interface	●	●	



NIS45 Infinity Plan Objective	4x/0.10, W.D.20.6mm	-	-	A52.1045-4
	10x/0.25, W.D.17.9mm	-	-	A52.1045-10
	20x/0.40, W.D.6.40mm	-	-	A52.1045-20
	40x/0.60, W.D.1.50mm	-	-	A52.1045-40
	60x/0.80, W.D.0.30mm	-	-	A52.1045-60
	100x/1.25(Oil), W.D.0.16mm	-	-	A52.1045-100
	100x/1.10(Water), W.D.0.16mm	-	-	A52.1045-100W
NIS60 Infinity Plan Objective	4x/0.10, W.D.30.0mm	●	●	A52.1060-4
	10x/0.25, W.D.10.2mm	●	●	A52.1060-10
	20x/0.40, W.D.4.8mm	○	○	A52.1060-20
	40x/0.65, W.D.1.5mm	●	●	A52.1060-40
	60x/0.80, W.D.0.30mm	○	○	A52.1060-60
	100x/1.25(Oil), W.D.0.3mm	●	●	A52.1060-100
	100x/1.10(Water), W.D.0.2mm	○	○	A52.1060-100W
NIS60 Infinity Plan Phase Contrast Objective	10x/0.25, W.D.10.2mm	○	○	A5C.1060-10
	20x/0.40, W.D.12.0mm	○	○	A5C.1060-20
	40x/0.65, W.D.0.7mm	○	○	A5C.1060-40
	100x/1.25(Oil), W.D.0.2mm	○	○	A5C.1060-100
Focusing	Coaxial Coarse & Fine Adjustment, Tension Adjustable, Fine Division 0.002mm, Coarse Focusing Range 28mm	●	●	
Working Stage	Double Layer Mechanical Rackless Stage, Size 230x150mm, Moving Range 78x54mm	-	-	
	Double Layer Mechanical Rackless Stage, Size 230x150mm, Moving Range 78x54mm, Anti-Scratch Hard Coating Dural Platform	●	●	
Condenser	Inserted Abbe Condenser N.A. 1.25, With Slot For Phase Contrast Slide And Dark Field Slide.	●	●	
Illumination	1W S-LED Critical Illumination	-	-	
	3W S-LED Kohler Illumination	●	●	
	Green Filter	●	●	
Dark Field	Dark Field Slide	○	○	A5D.1062
Polarizing	Simple Polarizing Set	○	○	A5P.1008
Phase Contrast	Phase Slider For 10x-40x	○	○	A5C.1062-S1040
	Phase Slider For 100x	○	○	A5C.1062-S100
Epi-Fluorescence Attachment	3W LED Epi-Fluorescence Attachment, Fly-Eye Lens Illumination, With 2 Filter Position + Bright Field Position, Switch Quickly, With Attachable UV Shield, B, G Filters	●	●	A5F.1062
	Filter U	○	○	A5F.1062-U
	Filter V	○	○	A5F.1062-V
Photo Adapter	1.0x C-Mount	○	○	A55.1062-1.0
	0.5x C-Mount	○	○	A55.1062-0.5
Power Supply	AC 100-240V,50/60Hz	●	●	
	USB Charging Port, Support To Use Exeternal Rechargeable Battery Power Bank Like Mobile Phone Out Door Freely	●	●	
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, Set Power Off Timer 5 Mins to 8 Hours, And So On.	●	●	
Dimensions	220(W)x290(D)x472(H) mm	●	●	
Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable				

# A14.1063

## Inverted Biological Phase Contrast Microscope

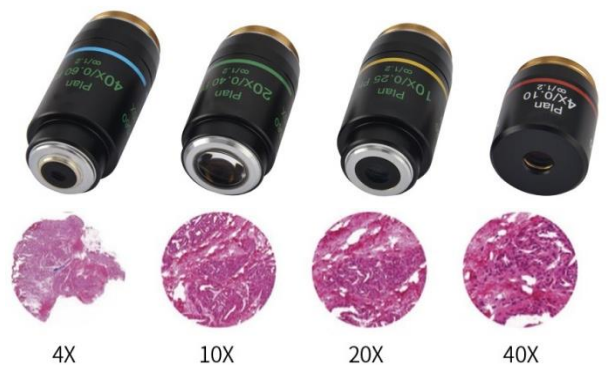
**OPTO-EDU**



Brand New Design 2019 High Level Inverted Laboratory Microscope  
 Super Long Working Distance Upto 187mm Condenser  
 ECO Auto Power Off Function + LCD Screen Available  
 Phase Contrast, Hoffman Contrast, Emboss Contrast (DIC) Optional  
 Upgradeable To Fluorescent Research Microscope A16.1063

### Intelligent Operating System

Objective Coding Converter  
 It Can Memorize The Illumination Brightness When Using Each Objective. When Different Objectives Are Converted To Each Other, The Light Intensity Is Automatically Adjusted To Reduce Visual Fatigue And Improve Work Efficiency.



	A14.1063	A14.1064
Observation	Bright Field, Phase Contrast, Hoffman Phase Contrast, DIC Emboss Contrast	
Nosepiece	Quintuple	Coded Quintuple
Illumination	3W LED	3W LED Kohler
LCD	--	Yes
ECO	--	Yes, 15 Mins Auto Off



A14.1063

A14.1064

# Product Specification

A14.1063, A14.1604 Inverted Biological Microscope, A16.1063, A16.1064 Inverted LED Fluorescent Microscope		A14. 1063	A14. 1064	A16. 1063	A16. 1064	Cata. No.
Optical System	NIS60 Infinite Optical System (F200)	●	●	●	●	
Observation Method	Bright Field,	●	●	●	●	
	Phase Contrast	●	●	○	○	
	Epi-Fluorescence	○	○	●	●	
	DIC 3D Emboss Contrast	○	○	○	○	
	Hoffman Phase Contrast	○	○	○	○	
Head	Seidentopf Viewing Head, Inclined At 45° , Interpupillary Distance 48-75mm, Eyepiece Tube Dia.30mm	●	●	●	●	
Eyepiece / F.O.V	EW10x/22mm, Diopter Adjustable, Dia.30mm	●	●	●	●	A51.1030-1022
	EW15x/16mm, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1030-1516
	EW20x/12mm, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1030-2012
Nosepiece	Quintuple Nosepiece, Dovetail Interface	●	-	●	-	
	Coded Quintuple Nosepiece, Dovetail Interface	-	●	-	●	
LWD Infinity Plan Objective	4x/0.10, W.D.30.0mm	●	●	○	○	A5M.1032-4
	10x/0.25, W.D.10.2mm	○	○	○	○	A5M.1032-10
	20x/0.40, W.D.12.0mm	○	○	○	○	A5M.1032-20
	40x/0.60, W.D.2.20mm	○	○	○	○	A5M.1032-40
LWD Infinity Plan Phase Contrast Objective	4x/0.10, W.D.30.0mm	○	○	○	○	A5C.1038-4
	10x/0.25, W.D.10.2mm	●	●	○	○	A5C.1038-10
	20x/0.40, W.D.12.0mm	●	●	○	○	A5C.1038-20
	40x/0.60, W.D.2.20mm	●	●	○	○	A5C.1038-40
LWD Infinity Plan Semi-APO Phase Contrast Objective	4x/0.13, W.D.17.0mm	○	○	○	○	A5C.1039-4
	10x/0.3, W.D.7.4mm	○	○	○	○	A5C.1039-10
	20x/0.45, W.D.8.0mm	○	○	○	○	A5C.1039-20
	40x/0.60, W.D.3.6mm	○	○	○	○	A5C.1039-40
	20x/0.45, W.D.7.5-8.8mm With Iris Adjustable	○	○	○	○	A5C.1040-20
	40x/0.60, W.D.3.0-4.4mm With Iris Adjustable	○	○	○	○	A5C.1040-40
LWD Infinity Plan Semi-APO Fluorescent Objective	60x/0.70, W.D.1.8-2.6mm With Iris Adjustable	○	○	○	○	A5C.1040-60
	4x/0.13, W.D.17.0mm, Cover Glass -	-	-	●	●	A5F.1032-4
	10x/0.30, W.D.7.4mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-10
	20x/0.45, W.D.8.0mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-20
	40x/0.60, W.D.3.3mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-40
Focusing System	60x/0.70, W.D.1.8-2.6mm, Cover Glass1.2mm	○	○	○	○	A5F.1032-60
	Coaxial Coarse & Fine Adjustment, Tension Adjustable (At Right Hand), Fine Division 0.002mm, Coarse Focusing Range Up 7mm, Down 1.5mm, Max Up To 18.5mm After Removing Focusing Limit.	●	●	●	●	
Working Stage	Plain Working Stage 170(X) x 250(Y)mm,	●	●	●	●	
	Attachable Mechanical Moving Stage, X-Y Coaxial Moving 128x80mm	●	●	●	●	A54.1063-XY
	Stage Clip	●	●	●	●	A54.1063-SC
	Well Clamper For Well Plate	●	●	●	●	A54.1063-WC
	Glass Stage Plate	●	●	●	●	A54.1063-G
	Metal Stage Plate For Culture Bottle	○	○	○	○	A54.1063-M
	Auxilliary Plate 2 Pieces (1 Piece Each Side)	●	●	●	●	A54.1063-A
	Universal Holder	●	●	●	●	A54.1063-U
	Terasaki Holder	○	○	○	○	A54.1063-T
	Dia.35mm Petri Dish Holder	○	○	○	○	A54.1063-35
	Dia.54mm Slide & Petri Dish Holder	○	○	○	○	A54.1063-54
Dia.65mm Slide & Petri Dish Holder	○	○	○	○	A54.1063-65	
Dia.90mm Petri Dish Holder	○	○	○	○	A54.1063-90	



Condenser	Long Working Distance Detachable Condenser NA 0.3, W.D.75mm, Without Condenser W.D.187mm	●	●	●	●	
Illumination	Transmitted Illumination 3W S-LED Critical Illumination	●	-	●	-	
	Transmitted Illumination 3W S-LED Kohler Illumination	-	●	-	●	
	Reflected Illumination 3W LED, For Epi-Fluorescence	○	○	●	●	
Phase Contrast	Centering Telescope 10x, Tube Dia. 30mm	●	●	○	○	A5C.1063-T
	Phase Slider For 4x//10x-20x-40x	●	●	○	○	A5C.1063-S
	Phase Slider For 10x-20x,40x APO Objectives	○	○	○	○	A5C.1063-APOS1
	Phase Slider For 4x,60x APO Objectives	○	○	○	○	A5C.1063-APOS2
Emboss Contrast DIC	Emboss Contrast Slider For 10x-20x-40x	○	○	○	○	A5C.1063-DIC
	Universal Emboss Contrast Plate For 10x-20x-40x	○	○	○	○	
Hoffman Phase Contrast	Hoffman Phase Contrast Set: --Hoffman Phase Contrast Condenser, With Polarizer, --Hoffman Phase Contrast Objective 10x, 20x, 40x --Hoffman Phase Slider For 10x, 20x, 40x --Centering Telescope 10x, Tube Dia. 30mm	○	○	○	○	A5C.1064
Epi-Fluorescence Attachment	Epi-Fluorescence Attachment, Turret With 3 Holes For Filter Cubes, With Noise Terminator Mechanism, With Attachable UV Shield	○	○	●	●	
	Filter Cube B + LED Unit, 365nm	○	○	●	●	A5F.1063-B
	Filter Cube G + LED Unit, 405nm	○	○	●	●	A5F.1063-G
	Filter Cube U + LED Unit, 485nm	○	○	●	●	A5F.1063-U
	Filter Cube V + LED Unit, 525nm	○	○	○	○	A5F.1063-V
	Filter Cube FITC					A5F.1063-FITC
	Filter Cube DAPI					A5F.1063-DAPI
Filter Cube TRITC					A5F.1063-TRITC	
Photo Port	Head Side Camera Port Switchable 100/0:0/100	●	●	●	●	
Photo Adapter	1.0x C-Mount	●	●	●	●	A55.1063-1.0
	0.5x C-Mount	○	○	○	○	A55.1063-0.5
	0.7x C-Mount	○	○	○	○	A55.1063-0.7
Power Supply	AC 100-240V,50/60Hz	●	●	●	●	
ECO Function	Auto Power Off 15 Minutes After No Operator Working	○	-	○	-	
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, ECO Set Power Off Timer 5 Mins to 8 Hours, And So On.	-	●	-	●	
Dimensions	244(W)x543(D)x526(H) mm	●	●	●	●	

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

# A14.1064

## Inverted Biological Phase Contrast Microscope

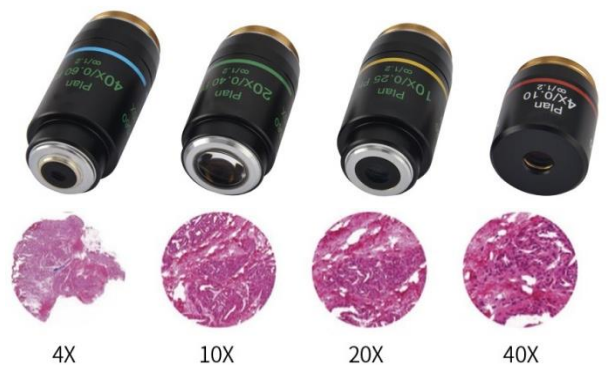
**OPTO-EDU**



Brand New Design 2019 High Level Inverted Laboratory Microscope  
 Super Long Working Distance Upto 187mm Condenser  
 ECO Auto Power Off Function + LCD Screen Available  
 Phase Contrast, Hoffman Contrast, Emboss Contrast (DIC) Optional  
 Upgradeable To Fluorescent Research Microscope A16.1064

### Intelligent Operating System

Objective Coding Converter  
 It Can Memorize The Illumination Brightness When Using Each Objective. When Different Objectives Are Converted To Each Other, The Light Intensity Is Automatically Adjusted To Reduce Visual Fatigue And Improve Work Efficiency.



	A14.1063	A14.1064
Observation	Bright Field, Phase Contrast, Hoffman Phase Contrast, DIC Emboss Contrast	
Nosepiece	Quintuple	Coded Quintuple
Illumination	3W LED	3W LED Kohler
LCD	--	Yes
ECO	--	Yes, 15 Mins Auto Off



A14.1063

A14.1064

# Product Specification

A14.1063, A14.1604 Inverted Biological Microscope, A16.1063, A16.1064 Inverted LED Fluorescent Microscope		A14. 1063	A14. 1064	A16. 1063	A16. 1064	Cata. No.
Optical System	NIS60 Infinite Optical System (F200)	●	●	●	●	
Observation Method	Bright Field,	●	●	●	●	
	Phase Contrast	●	●	○	○	
	Epi-Fluorescence	○	○	●	●	
	DIC 3D Emboss Contrast	○	○	○	○	
	Hoffman Phase Contrast	○	○	○	○	
Head	Seidentopf Viewing Head, Inclined At 45° , Interpupillary Distance 48-75mm, Eyepiece Tube Dia.30mm	●	●	●	●	
Eyepiece / F.O.V	EW10x/22mm, Diopter Adjustable, Dia.30mm	●	●	●	●	A51.1030-1022
	EW15x/16mm, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1030-1516
	EW20x/12mm, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1030-2012
Nosepiece	Quintuple Nosepiece, Dovetail Interface	●	-	●	-	
	Coded Quintuple Nosepiece, Dovetail Interface	-	●	-	●	
LWD Infinity Plan Objective	4x/0.10, W.D.30.0mm	●	●	○	○	A5M.1032-4
	10x/0.25, W.D.10.2mm	○	○	○	○	A5M.1032-10
	20x/0.40, W.D.12.0mm	○	○	○	○	A5M.1032-20
	40x/0.60, W.D.2.20mm	○	○	○	○	A5M.1032-40
LWD Infinity Plan Phase Contrast Objective	4x/0.10, W.D.30.0mm	○	○	○	○	A5C.1038-4
	10x/0.25, W.D.10.2mm	●	●	○	○	A5C.1038-10
	20x/0.40, W.D.12.0mm	●	●	○	○	A5C.1038-20
	40x/0.60, W.D.2.20mm	●	●	○	○	A5C.1038-40
LWD Infinity Plan Semi-APO Phase Contrast Objective	4x/0.13, W.D.17.0mm	○	○	○	○	A5C.1039-4
	10x/0.3, W.D.7.4mm	○	○	○	○	A5C.1039-10
	20x/0.45, W.D.8.0mm	○	○	○	○	A5C.1039-20
	40x/0.60, W.D.3.6mm	○	○	○	○	A5C.1039-40
	20x/0.45, W.D.7.5-8.8mm With Iris Adjustable	○	○	○	○	A5C.1040-20
	40x/0.60, W.D.3.0-4.4mm With Iris Adjustable	○	○	○	○	A5C.1040-40
LWD Infinity Plan Semi-APO Fluorescent Objective	60x/0.70, W.D.1.8-2.6mm With Iris Adjustable	○	○	○	○	A5C.1040-60
	4x/0.13, W.D.17.0mm, Cover Glass -	-	-	●	●	A5F.1032-4
	10x/0.30, W.D.7.4mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-10
	20x/0.45, W.D.8.0mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-20
	40x/0.60, W.D.3.3mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-40
Focusing System	60x/0.70, W.D.1.8-2.6mm, Cover Glass1.2mm	○	○	○	○	A5F.1032-60
	Coaxial Coarse & Fine Adjustment, Tension Adjustable (At Right Hand), Fine Division 0.002mm, Coarse Focusing Range Up 7mm, Down 1.5mm, Max Up To 18.5mm After Removing Focusing Limit.	●	●	●	●	
Working Stage	Plain Working Stage 170(X) x 250(Y)mm,	●	●	●	●	
	Attachable Mechanical Moving Stage, X-Y Coaxial Moving 128x80mm	●	●	●	●	A54.1063-XY
	Stage Clip	●	●	●	●	A54.1063-SC
	Well Clamper For Well Plate	●	●	●	●	A54.1063-WC
	Glass Stage Plate	●	●	●	●	A54.1063-G
	Metal Stage Plate For Culture Bottle	○	○	○	○	A54.1063-M
	Auxilliary Plate 2 Pieces (1 Piece Each Side)	●	●	●	●	A54.1063-A
	Universal Holder	●	●	●	●	A54.1063-U
	Terasaki Holder	○	○	○	○	A54.1063-T
	Dia.35mm Petri Dish Holder	○	○	○	○	A54.1063-35
	Dia.54mm Slide & Petri Dish Holder	○	○	○	○	A54.1063-54
	Dia.65mm Slide & Petri Dish Holder	○	○	○	○	A54.1063-65
Dia.90mm Petri Dish Holder	○	○	○	○	A54.1063-90	

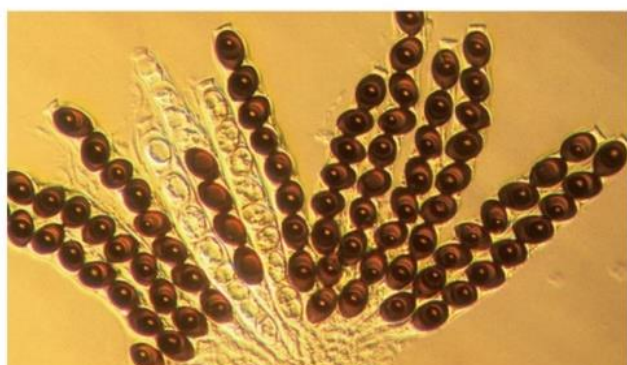


Condenser	Long Working Distance Detachable Condenser NA 0.3, W.D.75mm, Without Condenser W.D.187mm	●	●	●	●	
Illumination	Transmitted Illumination 3W S-LED Critical Illumination	●	-	●	-	
	Transmitted Illumination 3W S-LED Kohler Illumination	-	●	-	●	
	Reflected Illumination 3W LED, For Epi-Fluorescence	○	○	●	●	
Phase Contrast	Centering Telescope 10x, Tube Dia. 30mm	●	●	○	○	A5C.1063-T
	Phase Slider For 4x//10x-20x-40x	●	●	○	○	A5C.1063-S
	Phase Slider For 10x-20x,40x APO Objectives	○	○	○	○	A5C.1063-APOS1
	Phase Slider For 4x,60x APO Objectives	○	○	○	○	A5C.1063-APOS2
Emboss Contrast DIC	Emboss Contrast Slider For 10x-20x-40x	○	○	○	○	A5C.1063-DIC
	Universal Emboss Contrast Plate For 10x-20x-40x	○	○	○	○	
Hoffman Phase Contrast	Hoffman Phase Contrast Set: --Hoffman Phase Contrast Condenser, With Polarizer, --Hoffman Phase Contrast Objective 10x, 20x, 40x --Hoffman Phase Slider For 10x, 20x, 40x --Centering Telescope 10x, Tube Dia. 30mm	○	○	○	○	A5C.1064
Epi-Fluorescence Attachment	Epi-Fluorescence Attachment, Turret With 3 Holes For Filter Cubes, With Noise Terminator Mechanism, With Attachable UV Shield	○	○	●	●	
	Filter Cube B + LED Unit, 365nm	○	○	●	●	A5F.1063-B
	Filter Cube G + LED Unit, 405nm	○	○	●	●	A5F.1063-G
	Filter Cube U + LED Unit, 485nm	○	○	●	●	A5F.1063-U
	Filter Cube V + LED Unit, 525nm	○	○	○	○	A5F.1063-V
	Filter Cube FITC					A5F.1063-FITC
	Filter Cube DAPI					A5F.1063-DAPI
Filter Cube TRITC					A5F.1063-TRITC	
Photo Port	Head Side Camera Port Switchable 100/0:0/100	●	●	●	●	
Photo Adapter	1.0x C-Mount	●	●	●	●	A55.1063-1.0
	0.5x C-Mount	○	○	○	○	A55.1063-0.5
	0.7x C-Mount	○	○	○	○	A55.1063-0.7
Power Supply	AC 100-240V,50/60Hz	●	●	●	●	
ECO Function	Auto Power Off 15 Minutes After No Operator Working	○	-	○	-	
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, ECO Set Power Off Timer 5 Mins to 8 Hours, And So On.	-	●	-	●	
Dimensions	244(W)x543(D)x526(H) mm	●	●	●	●	
Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable						

# A14.1065

## Inverted Biological Phase Contrast Microscope

**OPTO-EDU**



Brand New Design 2019 High Level Inverted Laboratory Microscope  
Super Long Working Distance Upto 187mm Condenser  
Coded 5 Holes Nospiece With LCD Screen And Auto Brightness Adjust Function  
Phase Contrast, Hoffman Contrast, Emboss Contrast (DIC) Optional  
Upgradeable To Fluorescent Research Microscope A16.1064

### Product Specification

A14.1065 Inverted Biological Microscope, A16.1065 Inverted LED Fluorescent Microscope		A14.1065	A16.1065	Cata. No.
Optical System	NIS60 Infinite Optical System (F200)	●	●	
Observation Method	Bright Field,	●	●	
	Phase Contrast	●	○	
	Epi-Fluorscence	○	●	
	DIC 3D Emboss Contrast	○	○	
	Hoffman Phase Contrast	○	○	
Head	Tilting Seidentopf Binocular Head, Incline 0-45° Adjustable , Interpupillary Distance 48-75mm, Eyepiece Tube Dia.30mm	●	●	
Eyepiece / F.O.V	EW10x/22mm, Diopter Adjustable, Dia.30mm	●	●	A51.1030-1022
	EW15x/16mm, Diopter Adjustable, Dia.30mm	○	○	A51.1030-1516
	EW20x/12mm, Diopter Adjustable, Dia.30mm	○	○	A51.1030-2012

Nosepiece	Coded Quintuple Nosepiece, Dovetail Interface	●	●		
LWD Infinity Plan Objective	4x/0.10, W.D.30.0mm	●	○	A5M.1032-4	
	10x/0.25, W.D.10.2mm	○	○	A5M.1032-10	
	20x/0.40, W.D.12.0mm	○	○	A5M.1032-20	
	40x/0.60, W.D.2.20mm	○	○	A5M.1032-40	
LWD Infinity Plan Phase Contrast Objective	4x/0.10, W.D.30.0mm	○	○	A5C.1038-4	
	10x/0.25, W.D.10.2mm	●	○	A5C.1038-10	
	20x/0.40, W.D.12.0mm	●	○	A5C.1038-20	
	40x/0.60, W.D.2.20mm	●	○	A5C.1038-40	
LWD Infinity Plan Semi-APO Phase Contrast Objective	4x/0.13, W.D.17.0mm	○	○	A5C.1039-4	
	10x/0.3, W.D.7.4mm	○	○	A5C.1039-10	
	20x/0.45, W.D.8.0mm	○	○	A5C.1039-20	
	40x/0.60, W.D.3.6mm	○	○	A5C.1039-40	
	20x/0.45, W.D.7.5-8.8mm With Iris Adjustable	○	○	A5C.1040-20	
	40x/0.60, W.D.3.0-4.4mm With Iris Adjustable	○	○	A5C.1040-40	
LWD Infinity Plan Semi-APO Fluorescent Objective	60x/0.70, W.D.1.8-2.6mm With Iris Adjustable	○	○	A5C.1040-60	
	4x/0.13, W.D.17.0mm, Cover Glass -	-	●	A5F.1032-4	
	10x/0.30, W.D.7.4mm, Cover Glass1.2mm	-	●	A5F.1032-10	
	20x/0.45, W.D.8.0mm, Cover Glass1.2mm	-	●	A5F.1032-20	
Working Stage	40x/0.60, W.D.3.3mm, Cover Glass1.2mm	-	●	A5F.1032-40	
	60x/0.70, W.D.1.8-2.6mm, Cover Glass1.2mm	○	○	A5F.1032-60	
	Focusing System	Coaxial Coarse & Fine Adjustment, Tension Adjustable (At Right Hand), Fine Division 0.002mm, Coarse Focusing Range Up 7mm, Down 1.5mm, Max Up To 18.5mm After Removing Focusing Limit.	●	●	
	Working Stage	Plain Working Stage 170(X) x 250(Y)mm,	●	●	
		Attachable Mechanical Moving Stage, X-Y Coaxial Moving 128x80mm	●	●	A54.1063-XY
		Stage Clip	●	●	A54.1063-SC
		Well Clamper For Well Plate	●	●	A54.1063-WC
		Glass Stage Plate	●	●	A54.1063-G
		Metal Stage Plate For Culture Bottle	○	○	A54.1063-M
		Auxilliary Plate 2 Pieces (1 Piece Each Side)	●	●	A54.1063-A
		Universal Holder	●	●	A54.1063-U
		Terasaki Holder	○	○	A54.1063-T
Dia.35mm Petri Dish Holder		○	○	A54.1063-35	
Dia.54mm Slide & Petri Dish Holder		○	○	A54.1063-54	
Dia.65mm Slide & Petri Dish Holder	○	○	A54.1063-65		
Dia.90mm Petri Dish Holder	○	○	A54.1063-90		
Condenser	Long Working Distance Detachable Condenser NA 0.3, W.D.75mm, Without Condenser W.D.187mm	●	●		
Phase Contrast	Centering Telescope 10x, Tube Dia. 30mm	●	○	A5C.1063-T	
	Phase Slider For 4x//10x-20x-40x	●	○	A5C.1063-S	
	Phase Slider For 10x-20x,40x APO Objectives	○	○	A5C.1063-APOS1	
	Phase Slider For 4x,60x APO Objectives	○	○	A5C.1063-APOS2	
Emboss Contrast DIC	Emboss Contrast Slider For 10x-20x-40x	○	○	A5C.1063-DIC	
	Universal Emboss Contrast Plate For 10x-20x-40x	○	○		
Hoffman Phase Contrast	Hoffman Phase Contrast Set: --Hoffman Phase Contrast Condenser, With Polarizer, --Hoffman Phase Contrast Objective 10x, 20x, 40x --Hoffman Phase Slider For 10x, 20x, 40x --Centering Telescope 10x, Tube Dia. 30mm	○	○	A5C.1064	
Epi-Fluorescence Attachment	Epi-Fluorescence Attachment, Turret With 3 Holes For Filter Cubes, With Noise Terminator Mechanism, With Attachable UV Shield	○	●		
	Filter Cube B + LED Unit, 365nm	○	●	A5F.1063-B	
	Filter Cube G + LED Unit, 405nm	○	●	A5F.1063-G	



Epi-Fluorescence Attachment	Filter Cube U + LED Unit, 485nm	○	●	A5F.1063-U
	Filter Cube V + LED Unit, 525nm	○	○	A5F.1063-V
	Filter Cube FITC	○	○	A5F.1063-FITC
	Filter Cube DAPI	○	○	A5F.1063-DAPI
	Filter Cube TRITC	○	○	A5F.1063-TRITC
Photo Port	Head Side Camera Port Switchable 100/0:0/100	●	●	
Photo Adapter	1.0x C-Mount	●	●	A55.1063-1.0
	0.5x C-Mount	○	○	A55.1063-0.5
	0.7x C-Mount	○	○	A55.1063-0.7
Power Supply	AC 100-240V,50/60Hz	●	●	
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, ECO Set Power Off Timer 5 Mins to 8 Hours, And So On.	●	●	
Dimensions	244(W)x543(D)x526(H) mm	●	●	

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

# A16.1063

## Inverted LED Fluorescent Microscope, B,G

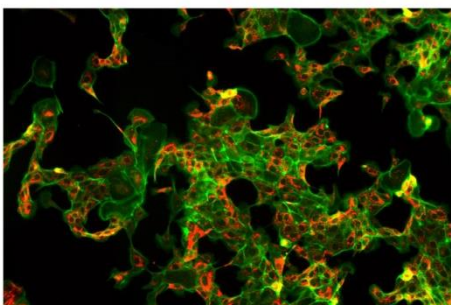
**OPTO-EDU**



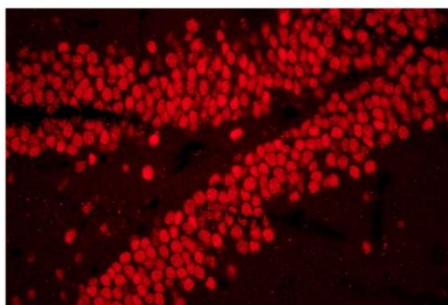
Brand New Design 2019 High Level Inverted Fluorescent Microscope  
Epi-Fluorescence Attachment, Turret With 3 Holes For Filter Cubes, With Noise Terminator Mechanism  
Super Long Working Distance Upto 187mm Condenser  
ECO Auto Power Off Function + LCD Screen Available  
Upgradeable To Fluorescent Research Microscope A16.1063

### Suitable For A Variety Of Fluorescent Dyes

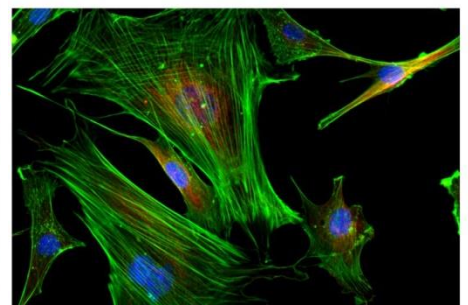
Equipped With 3 Fluorescent Filter Blocks, It Provides A Wide Range Of Choice Of Dyes And Capture Clear High Contrast Fluorescence Images.



Breast Cancer



Hippocampus



HC3T3 Mouse Brain Nerve Cells

# Product Specification

A14.1063, A14.1604 Inverted Biological Microscope, A16.1063, A16.1064 Inverted LED Fluorescent Microscope		A14. 1063	A14. 1064	A16. 1063	A16. 1064	Cata. No.
Optical System	NIS60 Infinite Optical System (F200)	●	●	●	●	
Observation Method	Bright Field,	●	●	●	●	
	Phase Contrast	●	●	○	○	
	Epi-Fluorescence	○	○	●	●	
	DIC 3D Emboss Contrast	○	○	○	○	
	Hoffman Phase Contrast	○	○	○	○	
Head	Seidentopf Viewing Head, Inclined At 45° , Interpupillary Distance 48-75mm, Eyepiece Tube Dia.30mm	●	●	●	●	
Eyepiece / F.O.V	EW10x/22mm, Diopter Adjustable, Dia.30mm	●	●	●	●	A51.1030-1022
	EW15x/16mm, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1030-1516
	EW20x/12mm, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1030-2012
Nosepiece	Quintuple Nosepiece, Dovetail Interface	●	-	●	-	
	Coded Quintuple Nosepiece, Dovetail Interface	-	●	-	●	
LWD Infinity Plan Objective	4x/0.10, W.D.30.0mm	●	●	○	○	A5M.1032-4
	10x/0.25, W.D.10.2mm	○	○	○	○	A5M.1032-10
	20x/0.40, W.D.12.0mm	○	○	○	○	A5M.1032-20
	40x/0.60, W.D.2.20mm	○	○	○	○	A5M.1032-40
LWD Infinity Plan Phase Contrast Objective	4x/0.10, W.D.30.0mm	○	○	○	○	A5C.1038-4
	10x/0.25, W.D.10.2mm	●	●	○	○	A5C.1038-10
	20x/0.40, W.D.12.0mm	●	●	○	○	A5C.1038-20
	40x/0.60, W.D.2.20mm	●	●	○	○	A5C.1038-40
LWD Infinity Plan Semi-APO Phase Contrast Objective	4x/0.13, W.D.17.0mm	○	○	○	○	A5C.1039-4
	10x/0.3, W.D.7.4mm	○	○	○	○	A5C.1039-10
	20x/0.45, W.D.8.0mm	○	○	○	○	A5C.1039-20
	40x/0.60, W.D.3.6mm	○	○	○	○	A5C.1039-40
	20x/0.45, W.D.7.5-8.8mm With Iris Adjustable	○	○	○	○	A5C.1040-20
	40x/0.60, W.D.3.0-4.4mm With Iris Adjustable	○	○	○	○	A5C.1040-40
LWD Infinity Plan Semi-APO Fluorescent Objective	60x/0.70, W.D.1.8-2.6mm With Iris Adjustable	○	○	○	○	A5C.1040-60
	4x/0.13, W.D.17.0mm, Cover Glass -	-	-	●	●	A5F.1032-4
	10x/0.30, W.D.7.4mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-10
	20x/0.45, W.D.8.0mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-20
	40x/0.60, W.D.3.3mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-40
Focusing System	60x/0.70, W.D.1.8-2.6mm, Cover Glass1.2mm	○	○	○	○	A5F.1032-60
	Coaxial Coarse & Fine Adjustment, Tension Adjustable (At Right Hand), Fine Division 0.002mm, Coarse Focusing Range Up 7mm, Down 1.5mm, Max Up To 18.5mm After Removing Focusing Limit.	●	●	●	●	
Working Stage	Plain Working Stage 170(X) x 250(Y)mm,	●	●	●	●	
	Attachable Mechanical Moving Stage, X-Y Coaxial Moving 128x80mm	●	●	●	●	A54.1063-XY
	Stage Clip	●	●	●	●	A54.1063-SC
	Well Clamper For Well Plate	●	●	●	●	A54.1063-WC
	Glass Stage Plate	●	●	●	●	A54.1063-G
	Metal Stage Plate For Culture Bottle	○	○	○	○	A54.1063-M
	Auxilliary Plate 2 Pieces (1 Piece Each Side)	●	●	●	●	A54.1063-A
	Universal Holder	●	●	●	●	A54.1063-U
	Terasaki Holder	○	○	○	○	A54.1063-T
	Dia.35mm Petri Dish Holder	○	○	○	○	A54.1063-35
	Dia.54mm Slide & Petri Dish Holder	○	○	○	○	A54.1063-54
	Dia.65mm Slide & Petri Dish Holder	○	○	○	○	A54.1063-65
Dia.90mm Petri Dish Holder	○	○	○	○	A54.1063-90	



Condenser	Long Working Distance Detachable Condenser NA 0.3, W.D.75mm, Without Condenser W.D.187mm	●	●	●	●	
Illumination	Transmitted Illumination 3W S-LED Critical Illumination	●	-	●	-	
	Transmitted Illumination 3W S-LED Kohler Illumination	-	●	-	●	
	Reflected Illumination 3W LED, For Epi-Fluorescence	○	○	●	●	
Phase Contrast	Centering Telescope 10x, Tube Dia. 30mm	●	●	○	○	A5C.1063-T
	Phase Slider For 4x//10x-20x-40x	●	●	○	○	A5C.1063-S
	Phase Slider For 10x-20x,40x APO Objectives	○	○	○	○	A5C.1063-APOS1
	Phase Slider For 4x,60x APO Objectives	○	○	○	○	A5C.1063-APOS2
Emboss Contrast DIC	Emboss Contrast Slider For 10x-20x-40x	○	○	○	○	A5C.1063-DIC
	Universal Emboss Contrast Plate For 10x-20x-40x	○	○	○	○	
Hoffman Phase Contrast	Hoffman Phase Contrast Set: --Hoffman Phase Contrast Condenser, With Polarizer, --Hoffman Phase Contrast Objective 10x, 20x, 40x --Hoffman Phase Slider For 10x, 20x, 40x --Centering Telescope 10x, Tube Dia. 30mm	○	○	○	○	A5C.1064
Epi-Fluorescence Attachment	Epi-Fluorescence Attachment, Turret With 3 Holes For Filter Cubes, With Noise Terminator Mechanism, With Attachable UV Shield	○	○	●	●	
	Filter Cube B + LED Unit, 365nm	○	○	●	●	A5F.1063-B
	Filter Cube G + LED Unit, 405nm	○	○	●	●	A5F.1063-G
	Filter Cube U + LED Unit, 485nm	○	○	●	●	A5F.1063-U
	Filter Cube V + LED Unit, 525nm	○	○	○	○	A5F.1063-V
	Filter Cube FITC					A5F.1063-FITC
	Filter Cube DAPI					A5F.1063-DAPI
Filter Cube TRITC					A5F.1063-TRITC	
Photo Port	Head Side Camera Port Switchable 100/0:0/100	●	●	●	●	
Photo Adapter	1.0x C-Mount	●	●	●	●	A55.1063-1.0
	0.5x C-Mount	○	○	○	○	A55.1063-0.5
	0.7x C-Mount	○	○	○	○	A55.1063-0.7
Power Supply	AC 100-240V,50/60Hz	●	●	●	●	
ECO Function	Auto Power Off 15 Minutes After No Operator Working	○	-	○	-	
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, ECO Set Power Off Timer 5 Mins to 8 Hours, And So On.	-	●	-	●	
Dimensions	244(W)x543(D)x526(H) mm	●	●	●	●	

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

# A16.1064

## Inverted LED Fluorescent Microscope, B,G

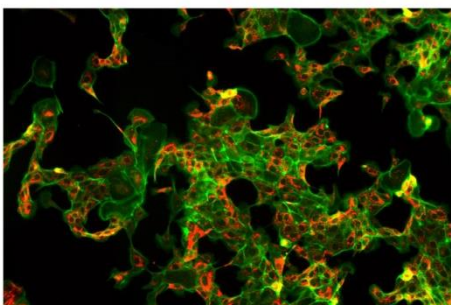
**OPTO-EDU**



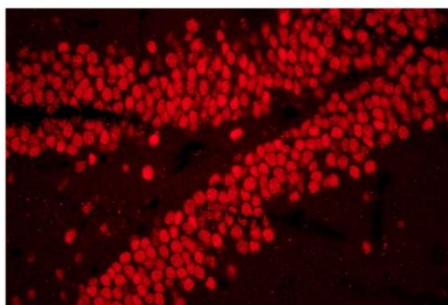
Brand New Design 2019 High Level Inverted Fluorescent Microscope  
Epi-Fluorescence Attachment, Turret With 3 Holes For Filter Cubes, With Noise Terminator Mechanism  
Super Long Working Distance Upto 187mm Condenser  
ECO Auto Power Off Function + LCD Screen Available  
Upgradeable To Fluorescent Research Microscope A16.1063

### Suitable For A Variety Of Fluorescent Dyes

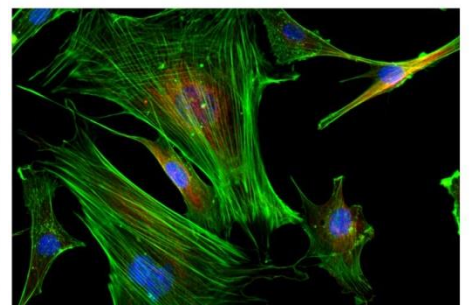
Equipped With 3 Fluorescent Filter Blocks, It Provides A Wide Range Of Choice Of Dyes And Capture Clear High Contrast Fluorescence Images.



Breast Cancer



Hippocampus



HC3T3 Mouse Brain Nerve Cells

# Product Specification

A14.1063, A14.1604 Inverted Biological Microscope, A16.1063, A16.1064 Inverted LED Fluorescent Microscope		A14. 1063	A14. 1064	A16. 1063	A16. 1064	Cata. No.
Optical System	NIS60 Infinite Optical System (F200)	●	●	●	●	
Observation Method	Bright Field,	●	●	●	●	
	Phase Contrast	●	●	○	○	
	Epi-Fluorescence	○	○	●	●	
	DIC 3D Emboss Contrast	○	○	○	○	
	Hoffman Phase Contrast	○	○	○	○	
Head	Seidentopf Viewing Head, Inclined At 45° , Interpupillary Distance 48-75mm, Eyepiece Tube Dia.30mm	●	●	●	●	
Eyepiece / F.O.V	EW10x/22mm, Diopter Adjustable, Dia.30mm	●	●	●	●	A51.1030-1022
	EW15x/16mm, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1030-1516
	EW20x/12mm, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1030-2012
Nosepiece	Quintuple Nosepiece, Dovetail Interface	●	-	●	-	
	Coded Quintuple Nosepiece, Dovetail Interface	-	●	-	●	
LWD Infinity Plan Objective	4x/0.10, W.D.30.0mm	●	●	○	○	A5M.1032-4
	10x/0.25, W.D.10.2mm	○	○	○	○	A5M.1032-10
	20x/0.40, W.D.12.0mm	○	○	○	○	A5M.1032-20
	40x/0.60, W.D.2.20mm	○	○	○	○	A5M.1032-40
LWD Infinity Plan Phase Contrast Objective	4x/0.10, W.D.30.0mm	○	○	○	○	A5C.1038-4
	10x/0.25, W.D.10.2mm	●	●	○	○	A5C.1038-10
	20x/0.40, W.D.12.0mm	●	●	○	○	A5C.1038-20
	40x/0.60, W.D.2.20mm	●	●	○	○	A5C.1038-40
LWD Infinity Plan Semi-APO Phase Contrast Objective	4x/0.13, W.D.17.0mm	○	○	○	○	A5C.1039-4
	10x/0.3, W.D.7.4mm	○	○	○	○	A5C.1039-10
	20x/0.45, W.D.8.0mm	○	○	○	○	A5C.1039-20
	40x/0.60, W.D.3.6mm	○	○	○	○	A5C.1039-40
	20x/0.45, W.D.7.5-8.8mm With Iris Adjustable	○	○	○	○	A5C.1040-20
	40x/0.60, W.D.3.0-4.4mm With Iris Adjustable	○	○	○	○	A5C.1040-40
LWD Infinity Plan Semi-APO Fluorescent Objective	60x/0.70, W.D.1.8-2.6mm With Iris Adjustable	○	○	○	○	A5C.1040-60
	4x/0.13, W.D.17.0mm, Cover Glass -	-	-	●	●	A5F.1032-4
	10x/0.30, W.D.7.4mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-10
	20x/0.45, W.D.8.0mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-20
	40x/0.60, W.D.3.3mm, Cover Glass1.2mm	-	-	●	●	A5F.1032-40
Focusing System	60x/0.70, W.D.1.8-2.6mm, Cover Glass1.2mm	○	○	○	○	A5F.1032-60
	Coaxial Coarse & Fine Adjustment, Tension Adjustable (At Right Hand), Fine Division 0.002mm, Coarse Focusing Range Up 7mm, Down 1.5mm, Max Up To 18.5mm After Removing Focusing Limit.	●	●	●	●	
Working Stage	Plain Working Stage 170(X) x 250(Y)mm,	●	●	●	●	
	Attachable Mechanical Moving Stage, X-Y Coaxial Moving 128x80mm	●	●	●	●	A54.1063-XY
	Stage Clip	●	●	●	●	A54.1063-SC
	Well Clamper For Well Plate	●	●	●	●	A54.1063-WC
	Glass Stage Plate	●	●	●	●	A54.1063-G
	Metal Stage Plate For Culture Bottle	○	○	○	○	A54.1063-M
	Auxilliary Plate 2 Pieces (1 Piece Each Side)	●	●	●	●	A54.1063-A
	Universal Holder	●	●	●	●	A54.1063-U
	Terasaki Holder	○	○	○	○	A54.1063-T
	Dia.35mm Petri Dish Holder	○	○	○	○	A54.1063-35
	Dia.54mm Slide & Petri Dish Holder	○	○	○	○	A54.1063-54
	Dia.65mm Slide & Petri Dish Holder	○	○	○	○	A54.1063-65
Dia.90mm Petri Dish Holder	○	○	○	○	A54.1063-90	



Condenser	Long Working Distance Detachable Condenser NA 0.3, W.D.75mm, Without Condenser W.D.187mm	●	●	●	●	
Illumination	Transmitted Illumination 3W S-LED Critical Illumination	●	-	●	-	
	Transmitted Illumination 3W S-LED Kohler Illumination	-	●	-	●	
	Reflected Illumination 3W LED, For Epi-Fluorescence	○	○	●	●	
Phase Contrast	Centering Telescope 10x, Tube Dia. 30mm	●	●	○	○	A5C.1063-T
	Phase Slider For 4x//10x-20x-40x	●	●	○	○	A5C.1063-S
	Phase Slider For 10x-20x,40x APO Objectives	○	○	○	○	A5C.1063-APOS1
	Phase Slider For 4x,60x APO Objectives	○	○	○	○	A5C.1063-APOS2
Emboss Contrast DIC	Emboss Contrast Slider For 10x-20x-40x	○	○	○	○	A5C.1063-DIC
	Universal Emboss Contrast Plate For 10x-20x-40x	○	○	○	○	
Hoffman Phase Contrast	Hoffman Phase Contrast Set: --Hoffman Phase Contrast Condenser, With Polarizer, --Hoffman Phase Contrast Objective 10x, 20x, 40x --Hoffman Phase Slider For 10x, 20x, 40x --Centering Telescope 10x, Tube Dia. 30mm	○	○	○	○	A5C.1064
Epi-Fluorescence Attachment	Epi-Fluorescence Attachment, Turret With 3 Holes For Filter Cubes, With Noise Terminator Mechanism, With Attachable UV Shield	○	○	●	●	
	Filter Cube B + LED Unit, 365nm	○	○	●	●	A5F.1063-B
	Filter Cube G + LED Unit, 405nm	○	○	●	●	A5F.1063-G
	Filter Cube U + LED Unit, 485nm	○	○	●	●	A5F.1063-U
	Filter Cube V + LED Unit, 525nm	○	○	○	○	A5F.1063-V
	Filter Cube FITC					A5F.1063-FITC
	Filter Cube DAPI					A5F.1063-DAPI
Filter Cube TRITC					A5F.1063-TRITC	
Photo Port	Head Side Camera Port Switchable 100/0:0/100	●	●	●	●	
Photo Adapter	1.0x C-Mount	●	●	●	●	A55.1063-1.0
	0.5x C-Mount	○	○	○	○	A55.1063-0.5
	0.7x C-Mount	○	○	○	○	A55.1063-0.7
Power Supply	AC 100-240V,50/60Hz	●	●	●	●	
ECO Function	Auto Power Off 15 Minutes After No Operator Working	○	-	○	-	
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, ECO Set Power Off Timer 5 Mins to 8 Hours, And So On.	-	●	-	●	
Dimensions	244(W)x543(D)x526(H) mm	●	●	●	●	

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

# A16.1065

## Inverted LED Fluorescent Microscope, B,G,U

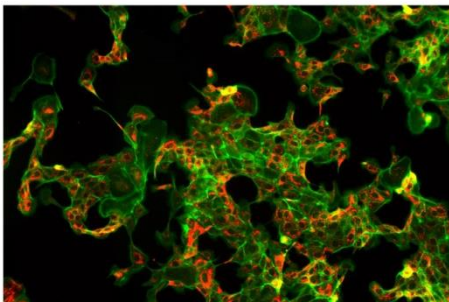
OPTO-EDU



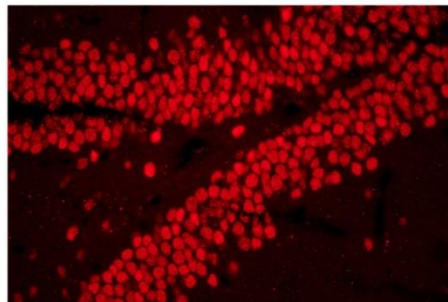
Brand New Design 2019 High Level Inverted Fluorescent Microscope  
Epi-Fluorescence Attachment, Turret With 3 Holes For Filter Cubes B,G,U Bands  
Super Long Working Distance Upto 187mm Condenser  
Coded 5 Holes Nosepiece With LCD Screen And Auto Brightness Adjust Function  
Phase Contrast, Hoffman Contrast, Emboss Contrast (DIC) Optional

### Suitable For A Variety Of Fluorescent Dyes

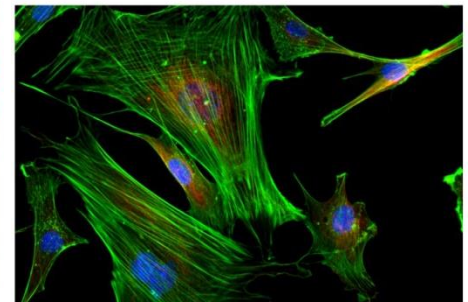
Equipped With 3 Fluorescent Filter Blocks, It Provides A Wide Range Of Choice Of Dyes And Capture Clear High Contrast Fluorescence Images.



Breast Cancer



Hippocampus



HC3T3 Mouse Brain Nerve Cells

# Product Specification

A14.1065 Inverted Biological Microscope,		A14.1065	A16.1065	Cata. No.
A16.1065 Inverted LED Fluorescent Microscope				
Optical System	NIS60 Infinite Optical System (F200)	●	●	
Observation Method	Bright Field,	●	●	
	Phase Contrast	●	○	
	Epi-Fluorescence	○	●	
	DIC 3D Emboss Contrast	○	○	
	Hoffman Phase Contrast	○	○	
Head	Tilting Seidentopf Binocular Head, Incline 0-45° Adjustable , Interpupillary Distance 48-75mm, Eyepiece Tube Dia.30mm	●	●	
Eyepiece / F.O.V	EW10x/22mm, Diopter Adjustable, Dia.30mm	●	●	A51.1030-1022
	EW15x/16mm, Diopter Adjustable, Dia.30mm	○	○	A51.1030-1516
	EW20x/12mm, Diopter Adjustable, Dia.30mm	○	○	A51.1030-2012
Nosepiece	Coded Quintuple Nosepiece, Dovetail Interface	●	●	
LWD Infinity Plan Objective	4x/0.10, W.D.30.0mm	●	○	A5M.1032-4
	10x/0.25, W.D.10.2mm	○	○	A5M.1032-10
	20x/0.40, W.D.12.0mm	○	○	A5M.1032-20
	40x/0.60, W.D.2.20mm	○	○	A5M.1032-40
	LWD Infinity Plan	4x/0.10, W.D.30.0mm	○	○
Phase Contrast Objective	10x/0.25, W.D.10.2mm	●	○	A5C.1038-10
	20x/0.40, W.D.12.0mm	●	○	A5C.1038-20
	40x/0.60, W.D.2.20mm	●	○	A5C.1038-40
LWD Infinity Plan	4x/0.13, W.D.17.0mm	○	○	A5C.1039-4
	Semi-APO	10x/0.3, W.D.7.4mm	○	○
Phase Contrast Objective	20x/0.45, W.D.8.0mm	○	○	A5C.1039-20
	40x/0.60, W.D.3.6mm	○	○	A5C.1039-40
	20x/0.45, W.D.7.5-8.8mm With Iris Adjustable	○	○	A5C.1040-20
	40x/0.60, W.D.3.0-4.4mm With Iris Adjustable	○	○	A5C.1040-40
	60x/0.70, W.D.1.8-2.6mm With Iris Adjustable	○	○	A5C.1040-60
LWD Infinity Plan	4x/0.13, W.D.17.0mm, Cover Glass -	-	●	A5F.1032-4
Semi-APO	10x/0.30, W.D.7.4mm, Cover Glass1.2mm	-	●	A5F.1032-10
Fluorescent Objective	20x/0.45, W.D.8.0mm, Cover Glass1.2mm	-	●	A5F.1032-20
	40x/0.60, W.D.3.3mm, Cover Glass1.2mm	-	●	A5F.1032-40
	60x/0.70, W.D.1.8-2.6mm, Cover Glass1.2mm	○	○	A5F.1032-60
Focusing System	Coaxial Coarse & Fine Adjustment, Tension Adjustable (At Right Hand), Fine Division 0.002mm, Coarse Focusing Range Up 7mm, Down 1.5mm, Max Up To 18.5mm After Removing Focusing Limit.	●	●	

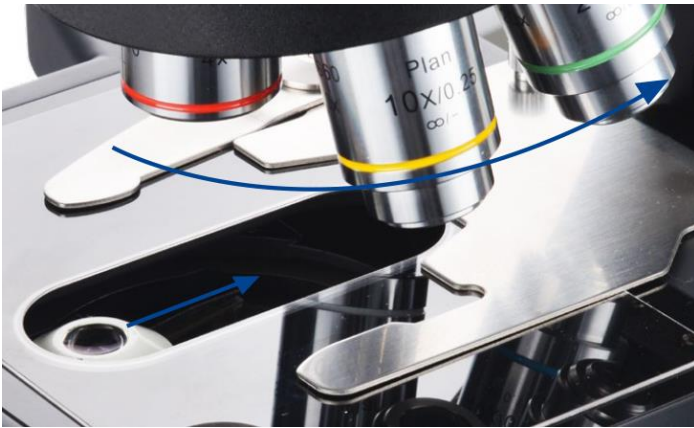


Working Stage	Plain Working Stage 170(X) x 250(Y)mm, Attachable Mechanical Moving Stage, X-Y Coaxial Moving 128x80mm	●	●	
	Stage Clip	●	●	A54.1063-XY
	Well Clamper For Well Plate	●	●	A54.1063-SC
	Glass Stage Plate	●	●	A54.1063-WC
	Metal Stage Plate For Culture Bottle	○	○	A54.1063-G
	Auxilliary Plate 2 Pieces (1 Piece Each Side)	●	●	A54.1063-M
	Universal Holder	●	●	A54.1063-A
	Terasaki Holder	○	○	A54.1063-U
	Dia.35mm Petri Dish Holder	○	○	A54.1063-T
	Dia.54mm Slide & Petri Dish Holder	○	○	A54.1063-35
	Dia.65mm Slide & Petri Dish Holder	○	○	A54.1063-54
	Dia.90mm Petri Dish Holder	○	○	A54.1063-65
				A54.1063-90
	Condenser	Long Working Distance Detachable Condenser NA 0.3, W.D.75mm, Without Condenser W.D.187mm	●	●
Phase Contrast	Centering Telescope 10x, Tube Dia. 30mm	●	○	A5C.1063-T
	Phase Slider For 4x//10x-20x-40x	●	○	A5C.1063-S
	Phase Slider For 10x-20x,40x APO Objectives	○	○	A5C.1063-APOS1
	Phase Slider For 4x,60x APO Objectives	○	○	A5C.1063-APOS2
Emboss Contrast DIC	Emboss Contrast Slider For 10x-20x-40x			
	Universal Emboss Contrast Plate For 10x- 20x-40x	○	○	A5C.1063-DIC
Hoffman Phase Contrast	Hoffman Phase Contrast Set: --Hoffman Phase Contrast Condenser, With Polarizer, --Hoffman Phase Contrast Objective 10x, 20x, 40x	○	○	A5C.1064
	--Hoffman Phase Slider For 10x, 20x, 40x			
	--Centering Telescope 10x, Tube Dia. 30mm			
Epi-Fluorescence Attachment	Epi-Fluorescence Attachment, Turret With 3 Holes For Filter Cubes, With Noise Terminator Mechanism, With Attachable UV Shield	○	●	
	Filter Cube B + LED Unit, 365nm	○	●	A5F.1063-B
	Filter Cube G + LED Unit, 405nm	○	●	A5F.1063-G
Epi-Fluorescence Attachment	Filter Cube U + LED Unit, 485nm	○	●	A5F.1063-U
	Filter Cube V + LED Unit, 525nm	○	○	A5F.1063-V
	Filter Cube FITC	○	○	A5F.1063-FITC
	Filter Cube DAPI	○	○	A5F.1063-DAPI
	Filter Cube TRITC	○	○	A5F.1063-TRITC
Photo Port	Head Side Camera Port Switchable 100/0:0/100	●	●	
Photo Adapter	1.0x C-Mount	●	●	A55.1063-1.0
	0.5x C-Mount	○	○	A55.1063-0.5
	0.7x C-Mount	○	○	A55.1063-0.7
Power Supply	AC 100-240V,50/60Hz	●	●	
LCD Screen	LCD Screen On Front Of Body, Display Using State Of Microscope, Including Magnification, Light Intensity, Standby Status, ECO Set Power Off Timer 5 Mins to 8 Hours, And So On.	●	●	
Dimensions	244(W)x543(D)x526(H) mm	●	●	
Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable				

# A12.1091

## Research Scientific Laboratory Microscope, Manual

**OPTO-EDU**

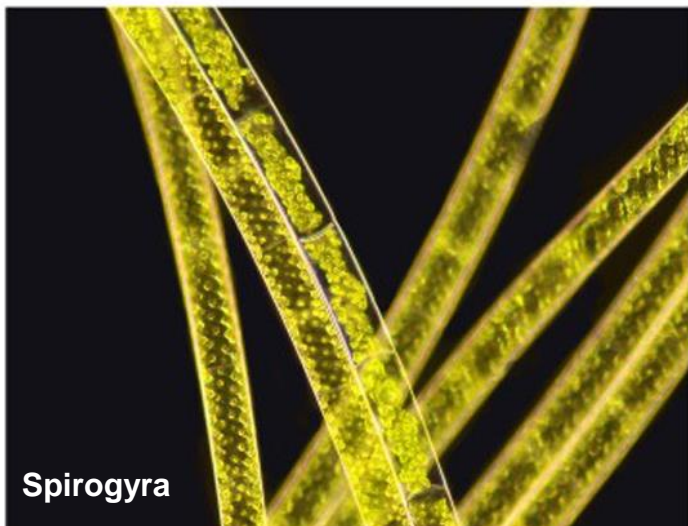


**Auto Coded Nosepiece & Auto Condenser**  
Automatically swing-out and swing-in the top-lens element according to the objective lens that is selected via the intelligent linking.

Research Level Laboratory Microscope For BF/DF/PH/PL/FL/DIC  
Extra Wide Eyepiece EW10x/25mm Dia.30mm Diopter Adjustable  
6 Holes Nosepiece With Infinity Plan Objective 4x10x20x40x100x  
Rackless Working Stage With Gorilla Glass 190x152mm Moving Range 78x54mm  
ECO Function Kohler Illumination 24V100W Halogen Or 3W SLED Optional

### ◆ Dark-field Viewing

It can be used for clearly viewing of blood or flagellum etc. fine structure.



# Product Specification

A12.1091, A12.1093 Research Level Scientific Laboratory Microscope		A12.1091		A12.1093		Cata.No.
		-H	-L	-H	-L	
Optical System	NIS60 Infinity Optical System	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	
	Dark Field	○	○	○	○	
	Polarizing	○	○	○	○	
	Phase Contrast	○	○	○	○	
	Flourescent	○	○	○	○	
	DIC	○	○	○	○	
Main Body	BH Manual Body + Halogen Illumination.	●				A54.1090-BH
	BL Manual Body + LED Illumination.		●			A54.1090-BL
	ATH Semi-Auto Body + Halogen Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust			●		A54.1090-ATH
	ATL Semi-Auto Body + LED Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust				●	A54.1090-ATL
Head	Seidentopf Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm	○	○	○	○	A53.1090-B
	Seidentopf Trinocular Head, Inclined 30°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	●	●			A53.1090-T
	Ergo Tilting Trinocular Head, Inclination 0°~35°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100			●	●	A53.1090-TT
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●●	●●	●●	●●	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-1022
	EW12.5x/16mm, High Eyepoint	○	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-2012
Nosepiece	Manual Nosepiece, Quintuple, Backward, Center Adjustable					A54.1091-5M
	Manual Nosepiece, Sextuple, Backward	●	●			A54.1091-6M
	Coded Nosepiece, Sextuple, Backward, For Auto Brightness Adjust	○	○			A54.1091-6C
	Auto Coded Nosepiece, Sextuple, Backward, Motorized Switch Objectives, Controlled By: 1. Shortcut Button On Right Side Of Base, Can Switch 2 Preseted Objectives Quickly 2. Remote Control Pad In Front Of Base, Press Each Button To Switch Objectives And Adjust The Light Intensity Automatically. 2 Buttons Can Be Self-Defined For Most Commonly Used Objecives, Press Green Button Can Swap Between Them	○	○	●	●	A54.1091-6A
	With Slot For Polarizing Compensator Slider Or DIC Slider Protect Cover For Nosepiece Holes	●	●	●	●	
NIS60 N-PLN Infinity Plan Objective	2x/0.06, W.D.7.5mm, Cover Glass 0.17mm	○	○	○	○	A52.1090-2
	4x/0.10, W.D.30mm, Cover Glass 0.17mm	●	●	●	●	A52.1090-4
	10x/0.25, W.D.10.2mm, Cover Glass 0.17mm	●	●	●	●	A52.1090-10
	20x/0.40, W.D.12mm, Cover Glass 0.17mm	●	●	●	●	A52.1090-20
	40x/0.65, W.D.0.7mm, Cover Glass 0.17mm	●	●	●	●	A52.1090-40
	50x/0.95(Oil), W.D.0.19mm, Cover Glass 0.17mm	○	○	○	○	A52.1090-50
	60x/0.8, W.D.0.3mm, Cover Glass 0.17mm	○	○	○	○	A52.1090-60
100x/1.25(Oil), W.D.0.2mm, Cover Glass 0.17mm	●	●	●	●	A52.1090-100	



NIS60 APO Infinity Plan	20x/0.75, W.D.1.1mm, Cover Glass 0.17mm	○	○	○	○	A52.1091-20
	100x/1.45(Oil), W.D.0.13mm, Cover Glass 0.17mm	○	○	○	○	A52.1091-100
Working Stage	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Gorilla Glass Insert, Left Handle	○	○			A54.1092-GL
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Gorilla Glass Insert, Right Handle	●	●			A54.1092-GR
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Sapphire Glass Insert, Left Handle			○	○	A54.1092-SL
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Sapphire Glass Insert, Right Handle			●	●	A54.1092-SR
	Low Position Control Knob, Height Adjustable Up/Down 18mm, Convex Point Guide Mechanism For Easily Put Slide By One Hand, With Tension Adjustable Ring, With Safety Stop Screw	●	●	●	●	
Condenser	Swing-Out Condenser NA0.9/0.25	●	●			A56.1091-S
	Auto Swing-Out Condenser NA0.9/0.25			●	●	A56.1091-A
Focusing	Coaxial Coarse & Fine Focusing, Fine Division 0.001mm, Focusing Range 35mm, Coarse Stroke 37.7mm, Fine Stroke 0.1mm, Can Exchange Hand Wheel Between Left/Right	●	●	●	●	
Light Source	Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House	●		●		A56.1090-12V100W
	Transmit Kohler Illumination, Brightness Adjustable, 3W S-LED, Built-in Main Body		●		●	A56.1090-3WLED
	ECO Function Support Auto Power Off After 30 Mins From Operator Leave To Save Energy	●	●	●	●	A56.1090-ECO
	Auto Brightness Adjust, Brightness For Each Objective Can Be Memorized And Restored When Objective Is Selected	○	○	●	●	A56.1090-AB
	A12.1091 Upgradeable To Auto Brightness Adjust, Must Upgrade To A54.1091-6C Coded Nosepiece At Same Time					
Filter For Transmit Light	Filter Holder On Base, Can Hold 3 Filters	●	●	●	●	A56.1092-H
	Filter LBD	●	●	●	●	A56.1092-LBD
	Filter Green	●	●	●	●	A56.1092-G
	Filter Yellow	●	●	●	●	A56.1092-Y
	Filter ND6	●	●	●	●	A56.1092-ND6
	Filter ND25	●	●	●	●	A56.1092-ND25
Adapter	Eyepiece Adapter Dia.23.2mm	○	○	○	○	A55.1090-E
	C-Mount 1.0x	○	○	○	○	A55.1090-1.0x
	C-Mount 0.5x	○	○	○	○	A55.1090-0.5x
Software	NOMIS Basic Image Processing Software	○	○	○	○	A30.1090

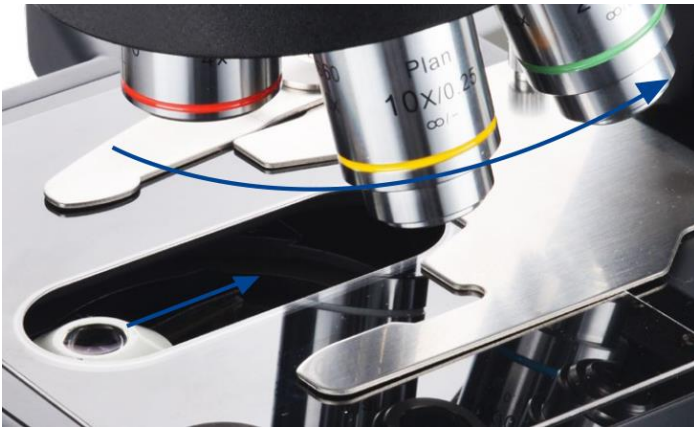
Full-Auto Motorized Control Unit	Including Control Stick, Controller Box, Z Axis Moto Control Part, Motorized X/Y Mechanical Stage --Travel Range X:125mm, Y:75mm, --Minimum Step 0.1um --Re-Position Accurate +/-1.5um --Max Speed 25mm/s --Size: 275x239x44.5mm --Soft Stop, Mechanical Stop, Opto-Electro Switch Stop --Z Axis Re-Position Accurate: Average +/-1.5um, Near Focus +/-0.1um --Z Axis Max Speed 10r/s --3D Control Stick, 4 Speeds --Connection By USB2.0 & RS232 --Communication Speed 9600 bits				○	○	A54.1095-A
	Upgrade To Z Axis With Optical Grating Ruler				○	○	A54.1095-B
Dark Field	Dark Field Condenser, N.A. 0.7~0.9, Dry	○	○	○	○		A5D.1090-D
	Dark Field Condenser, N.A. 1.25~1.36, Immersion	○	○	○	○		A5D.1090-I
	Dark Field Objective, Infinity Plan 100X, For Immersion Dark Field Observation	○	○	○	○		A5D.1030-3
Polarizing	Dark Field Objective, Infinity Plan 100X, With Iris Diaphragm, For Immersion Dark Field Observation	○	○	○	○		A5D.1030-4
	<a href="#">Polarizer For Transmit Light Source, Swing-Out, On Collector</a>	○	○	○	○		<a href="#">A5P.1091-BP</a>
	<a href="#">Analyzer For Transmit Light, Slide With Quartz Wedge Compensator</a>	○	○	○	○		<a href="#">A5P.1091-BA</a>
	Upgrade To A15.1091 Professional Polarizing Microscope	○	○				<a href="#">A15.1091</a>
Phase Contrast	Turret Phase Contrast Condenser, Center Adjustable	○	○	○	○		A5C.1090
	Centering Telescope 10x	○	○	○	○		A5C.1092
	Infinity Plan Phase Contrast Objective N-PLN PH 10x/0.25	○	○	○	○		A5C.1091-10
	Infinity Plan Phase Contrast Objective N-PLN PH 20x/0.40	○	○	○	○		A5C.1091-20
	Infinity Plan Phase Contrast Objective N-PLN PH 40x/0.65	○	○	○	○		A5C.1091-40
	Infinity Plan Phase Contrast Objective N-PLN PH 100x/1.25(Oil)	○	○	○	○		A5C.1091-100
DIC	Polarizer For Transmit Light Source	○	○	○	○		A5P.1090-TP
	Turret DIC Condenser	○	○	○	○		A5C.1095
	DIC Slide 10x, Used With Semi-APO Fluorescent Objective	○	○	○	○		A5C.1095-10
	DIC Slide 20x/40x, Used With Semi-APO Fluorescent Objective	○	○	○	○		A5C.1095-2040
	DIC Slide 100x, Used With Semi-APO Fluorescent Objective	○	○	○	○		A5C.1095-10
	DIC Slide With Analyzer 10x-20x	○	○	○	○		A5C.1095-1020P
	DIC Slide With Analyzer 40x-100x	○	○	○	○		A5C.1095-40100P
NIS60 N-PLFN Semi-APO Fluorescent Objective For DIC	10x/0.3, W.D.8.1, Cover Glass 0.17mm	○	○	○	○		A5F.1091-10
	20x/0.5, W.D.2.1, Cover Glass 0.17mm	○	○	○	○		A5F.1091-20
	40x/0.75, W.D.0.7, Cover Glass 0.17mm	○	○	○	○		A5F.1091-40
	100x/1.3, W.D.0.15, Cover Glass 0.17mm	○	○	○	○		A5F.1091-100
Fluorescent	Upgrade To <a href="#">A16.1093</a> Fluorescent Microscope	-	-	○	○		<a href="#">A16.1093</a>
Other Accessories	Working Stage Holder Bracket	●	●	●	●		A54.1096
	Adapter To Adjust Eye Position	○	○	○	○		A54.1096-A1
	Adapter To Lower The Stage Position 1"	○	○	○	○		A54.1096-A2
	Immersion Oil	●	●	●	●		A50.1090-01
	Allen Wrench	●	●	●	●		A50.1090-02
	Power Cord	●	●	●	●		A50.1090-03
	Short Eye Cover, For Eyepiece	○	○	○	○		A50.1090-04
	Long Eye Cover, For Eyepiece	○	○	○	○		A50.1090-05
	Eyepiece Micrometer, Cross	○	○	○	○		A50.1090-06
	Adapter Ring To Install Eyepiece Micrometer	○	○	○	○		A50.1090-07
USB Cable	○	○	○	○		A50.1090-08	

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

# A12.1093

## Research Scientific Laboratory Microscope, Semi-Auto

**OPTO-EDU**

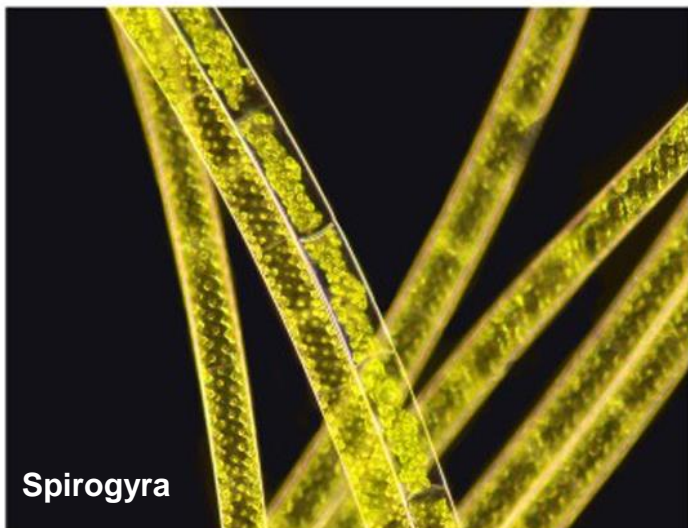


**Auto Coded Nosepiece & Auto Condenser**  
Automatically swing-out and swing-in the top-lens element according to the objective lens that is selected via the intelligent linking.

Research Level Laboratory Microscope For BF/DF/PH/PL/FL/DIC  
Extra Wide Eyepiece EW10x/25mm Dia.30mm Diopter Adjustable  
Auto 6 Holes Nosepiece With Infinity Plan Objective 4x10x20x40x100x  
Auto Condenser & Brightness Adjust ECO Function Kohler Illumination 24V100W Halogen Or  
3W SLED Optional  
Rackless Working Stage With Sapphire Crystal Glass Insert 190x152mm Moving Range 78x54mm

### ◆ Dark-field Viewing

It can be used for clearly viewing of blood or flagellum etc. fine structure.





# Product Specification

A12.1091, A12.1093 Research Level Scientific Laboratory Microscope		A12.1091		A12.1093		Cata.No.
		-H	-L	-H	-L	
Optical System	NIS60 Infinity Optical System	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	
	Dark Field	○	○	○	○	
	Polarizing	○	○	○	○	
	Phase Contrast	○	○	○	○	
	Flourescent	○	○	○	○	
	DIC	○	○	○	○	
Main Body	BH Manual Body + Halogen Illumination.	●				A54.1090-BH
	BL Manual Body + LED Illumination.		●			A54.1090-BL
	ATH Semi-Auto Body + Halogen Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust			●		A54.1090-ATH
	ATL Semi-Auto Body + LED Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust				●	A54.1090-ATL
Head	Seidentopf Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm	○	○	○	○	A53.1090-B
	Seidentopf Trinocular Head, Inclined 30°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	●	●			A53.1090-T
	Ergo Tilting Trinocular Head, Inclination 0°~35°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100			●	●	A53.1090-TT
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●●	●●	●●	●●	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-1022
	EW12.5x/16mm, High Eyepoint	○	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-2012
Nosepiece	Manual Nosepiece, Quintuple, Backward, Center Adjustable					A54.1091-5M
	Manual Nosepiece, Sextuple, Backward	●	●			A54.1091-6M
	Coded Nosepiece, Sextuple, Backward, For Auto Brightness Adjust	○	○			A54.1091-6C
	Auto Coded Nosepiece, Sextuple, Backward, Motorized Switch Objectives, Controlled By: 1. Shortcut Button On Right Side Of Base, Can Switch 2 Preseted Objectives Quickly 2. Remote Control Pad In Front Of Base, Press Each Button To Switch Objectives And Adjust The Light Intensity Automatically. 2 Buttons Can Be Self-Defined For Most Commonly Used Objecives, Press Green Button Can Swap Between Them	○	○	●	●	A54.1091-6A
	With Slot For Polarizing Compensator Slider Or DIC Slider	●	●	●	●	
	Protect Cover For Nosepiece Holes	●	●	●	●	
NIS60 N-PLN Infinity Plan Objective	2x/0.06, W.D.7.5mm, Cover Glass 0.17mm	○	○	○	○	A52.1090-2
	4x/0.10, W.D.30mm, Cover Glass 0.17mm	●	●	●	●	A52.1090-4
	10x/0.25, W.D.10.2mm, Cover Glass 0.17mm	●	●	●	●	A52.1090-10
	20x/0.40, W.D.12mm, Cover Glass 0.17mm	●	●	●	●	A52.1090-20
	40x/0.65, W.D.0.7mm, Cover Glass 0.17mm	●	●	●	●	A52.1090-40
	50x/0.95(Oil), W.D.0.19mm, Cover Glass 0.17mm	○	○	○	○	A52.1090-50
	60x/0.8, W.D.0.3mm, Cover Glass 0.17mm	○	○	○	○	A52.1090-60
100x/1.25(Oil), W.D.0.2mm, Cover Glass 0.17mm	●	●	●	●	A52.1090-100	

NIS60 APO Infinity Plan	20x/0.75, W.D.1.1mm, Cover Glass 0.17mm	○	○	○	○	A52.1091-20	
	100x/1.45(Oil), W.D.0.13mm, Cover Glass 0.17mm	○	○	○	○	A52.1091-100	
Working Stage	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Gorilla Glass Insert, Left Handle	○	○			A54.1092-GL	
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Gorilla Glass Insert, Right Handle	●	●			A54.1092-GR	
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Sapphire Glass Insert, Left Handle				○	○	A54.1092-SL
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Sapphire Glass Insert, Right Handle				●	●	A54.1092-SR
	Low Position Control Knob, Height Adjustable Up/Down 18mm, Convex Point Guide Mechanism For Easily Put Slide By One Hand, With Tension Adjustable Ring, With Safety Stop Screw	●	●	●	●		
Condenser	Swing-Out Condenser NA0.9/0.25	●	●			A56.1091-S	
	Auto Swing-Out Condenser NA0.9/0.25			●	●	A56.1091-A	
Focusing	Coaxial Coarse & Fine Focusing, Fine Division 0.001mm, Focusing Range 35mm, Coarse Stroke 37.7mm, Fine Stroke 0.1mm, Can Exchange Hand Wheel Between Left/Right	●	●	●	●		
Light Source	Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House	●		●		A56.1090-12V100W	
	Transmit Kohler Illumination, Brightness Adjustable, 3W S-LED, Built-in Main Body		●		●	A56.1090-3WLED	
	ECO Function Support Auto Power Off After 30 Mins From Operator Leave To Save Energy	●	●	●	●	A56.1090-ECO	
	Auto Brightness Adjust, Brightness For Each Objective Can Be Memorized And Restored When Objective Is Selected						
	A12.1091 Upgradeable To Auto Brightness Adjust, Must Upgrade To A54.1091-6C Coded Nosepiece At Same Time	○	○	●	●		A56.1090-AB
Filter For Transmit Light	Filter Holder On Base, Can Hold 3 Filters	●	●	●	●	A56.1092-H	
	Filter LBD	●	●	●	●	A56.1092-LBD	
	Filter Green	●	●	●	●	A56.1092-G	
	Filter Yellow	●	●	●	●	A56.1092-Y	
	Filter ND6	●	●	●	●	A56.1092-ND6	
	Filter ND25	●	●	●	●	A56.1092-ND25	
Adapter	Eyepiece Adapter Dia.23.2mm	○	○	○	○	A55.1090-E	
	C-Mount 1.0x	○	○	○	○	A55.1090-1.0x	
	C-Mount 0.5x	○	○	○	○	A55.1090-0.5x	
Software	NOMIS Basic Image Processing Software	○	○	○	○	A30.1090	

Full-Auto Motorized Control Unit	Including Control Stick, Controller Box, Z Axis Moto Control Part, Motorized X/Y Mechanical Stage --Travel Range X:125mm, Y:75mm, --Minimum Step 0.1um --Re-Position Accurate +/-1.5um --Max Speed 25mm/s --Size: 275x239x44.5mm --Soft Stop, Mechanical Stop, Opto-Electro Switch Stop --Z Axis Re-Position Accurate: Average +/-1.5um, Near Focus +/-0.1um --Z Axis Max Speed 10r/s --3D Control Stick, 4 Speeds --Connection By USB2.0 & RS232 --Communication Speed 9600 bits				○	○	A54.1095-A
	Upgrade To Z Axis With Optical Grating Ruler				○	○	A54.1095-B
Dark Field	Dark Field Condenser, N.A. 0.7~0.9, Dry	○	○	○	○		A5D.1090-D
	Dark Field Condenser, N.A. 1.25~1.36, Immersion	○	○	○	○		A5D.1090-I
	Dark Field Objective, Infinity Plan 100X, For Immersion Dark Field Observation	○	○	○	○		A5D.1030-3
Polarizing	Dark Field Objective, Infinity Plan 100X, With Iris Diaphragm, For Immersion Dark Field Observation	○	○	○	○		A5D.1030-4
	<a href="#">Polarizer For Transmit Light Source, Swing-Out, On Collector</a>	○	○	○	○		<a href="#">A5P.1091-BP</a>
	<a href="#">Analyzer For Transmit Light, Slide With Quartz Wedge Compensator</a>	○	○	○	○		<a href="#">A5P.1091-BA</a>
	Upgrade To A15.1091 Professional Polarizing Microscope	○	○				<a href="#">A15.1091</a>
Phase Contrast	Turret Phase Contrast Condenser, Center Adjustable	○	○	○	○		A5C.1090
	Centering Telescope 10x	○	○	○	○		A5C.1092
	Infinity Plan Phase Contrast Objective N-PLN PH 10x/0.25	○	○	○	○		A5C.1091-10
	Infinity Plan Phase Contrast Objective N-PLN PH 20x/0.40	○	○	○	○		A5C.1091-20
	Infinity Plan Phase Contrast Objective N-PLN PH 40x/0.65	○	○	○	○		A5C.1091-40
	Infinity Plan Phase Contrast Objective N-PLN PH 100x/1.25(Oil)	○	○	○	○		A5C.1091-100
DIC	Polarizer For Transmit Light Source	○	○	○	○		A5P.1090-TP
	Turret DIC Condenser	○	○	○	○		A5C.1095
	DIC Slide 10x, Used With Semi-APO Fluorescent Objective	○	○	○	○		A5C.1095-10
	DIC Slide 20x/40x, Used With Semi-APO Fluorescent Objective	○	○	○	○		A5C.1095-2040
	DIC Slide 100x, Used With Semi-APO Fluorescent Objective	○	○	○	○		A5C.1095-10
	DIC Slide With Analyzer 10x-20x	○	○	○	○		A5C.1095-1020P
	DIC Slide With Analyzer 40x-100x	○	○	○	○		A5C.1095-40100P
NIS60 N-PLFN Semi-APO Fluorescent Objective For DIC	10x/0.3, W.D.8.1, Cover Glass 0.17mm	○	○	○	○		A5F.1091-10
	20x/0.5, W.D.2.1, Cover Glass 0.17mm	○	○	○	○		A5F.1091-20
	40x/0.75, W.D.0.7, Cover Glass 0.17mm	○	○	○	○		A5F.1091-40
	100x/1.3, W.D.0.15, Cover Glass 0.17mm	○	○	○	○		A5F.1091-100
Fluorescent	Upgrade To <a href="#">A16.1093</a> Fluorescent Microscope	-	-	○	○		<a href="#">A16.1093</a>
Other Accessories	Working Stage Holder Bracket	●	●	●	●		A54.1096
	Adapter To Adjust Eye Position	○	○	○	○		A54.1096-A1
	Adapter To Lower The Stage Position 1"	○	○	○	○		A54.1096-A2
	Immersion Oil	●	●	●	●		A50.1090-01
	Allen Wrench	●	●	●	●		A50.1090-02
	Power Cord	●	●	●	●		A50.1090-03
	Short Eye Cover, For Eyepiece	○	○	○	○		A50.1090-04
	Long Eye Cover, For Eyepiece	○	○	○	○		A50.1090-05
	Eyepiece Micrometer, Cross	○	○	○	○		A50.1090-06
	Adapter Ring To Install Eyepiece Micrometer	○	○	○	○		A50.1090-07
USB Cable	○	○	○	○		A50.1090-08	

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable



# A12.1095

## Research Scientific Laboratory Microscope, Full-Auto Motorized

**OPTO-EDU**



3 Holes Fluorescent Slide + 5W LED Fluorescent Illumination  
 Seidentopf Trinocular Head, Light Split Switch E100:P0 / E20:P80  
 LWD Infinity Plan Objectives Bright Field & Phase Contrast Observation Supported  
 LWD Condenser N.A.0.3 Working Distance 72mm, Up To 195mm Without Condenser  
 Standard Halogen 6V30W Koehler Illumination, 5W LED Optional For Choice

### Product Specification

A12.1095 Full Auto Motorized Research Level Scientific Laboratory Microscope		A12.1091		A12.1093		A12.109	Cata.No.
		-H	-L	-H	-L	5	
Optical System	NIS60 Infinity Optical System	●	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	●	
	Dark Field	○	○	○	○	○	
	Polarizing	○	○	○	○	○	
	Phase Contrast	○	○	○	○	○	
	Flourescent	○	○	○	○	○	
	DIC	○	○	○	○	○	
Main Body	BH Manual Body + Halogen Illumination.	●					A54.1090-BH
	BL Manual Body + LED Illumination.		●				A54.1090-BL
	ATH Semi-Auto Body + Halogen Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust			●			A54.1090-ATH
	ATL Semi-Auto Body + LED Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust				●		A54.1090-ATL
	Full Auto Body + LED Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust					●	
	Auto X/Y/Z Motorized Control Working Stage+						
	Information LCD Screen						

Head	Seidentopf Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm	○	○	○	○	○	A53.1090-B
	Seidentopf Trinocular Head, Inclined 30°, Interpupillary Distance 47-78mm, 3 Level Light Split Switch E100:P0/E20:P80/E0:P100	●	●	○	○	●	A53.1090-T
	Ergo Tilting Trinocular Head, Inclination 0°~35°, Interpupillary Distance 47-78mm, 3 Level Light Split Switch E100:P0/E20:P80/E0:P100	○	○	●	●	○	A53.1090-TT
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●●	●●	●●	●●	●●	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1022
	EW12.5x/16mm, High Eyepoint	○	○	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-2012
Nosepiece	Manual Nosepiece, Quintuple, Backward, Center Adjustable						A54.1091-5M
	Manual Nosepiece, Sextuple, Backward	●	●				A54.1091-6M
	Coded Nosepiece, Sextuple, Backward, For Auto Brightness Adjust	○	○				A54.1091-6C
	Auto Coded Nosepiece, Sextuple, Backward, Motorized Switch Objectives, Controlled By: 1. Shortcut Button On Right Side Of Base, Can Switch 2 Preseted Objectives Quickly 2. Remote Control Pad In Front Of Base, Press Each Button To Switch Objectives And Adjust The Light Intensity Automatically. 2 Buttons Can Be Self-Defined For Most Commonly Used Objectives, Press Green Button Can Swap Between Them	○	○	●	●	●	A54.1091-6A
	With Slot For Polarizing Compensator Slider Or DIC Slider	●	●	●	●	●	
Protect Cover For Nosepiece Holes	●	●	●	●	●	A54.1091-C	
NIS60	2x/0.06, W.D.7.5mm, Cover Glass 0.17mm	○	○	○	○	○	A52.1090-2
N-PLN	4x/0.10, W.D.30mm, Cover Glass 0.17mm	●	●	●	●	●	A52.1090-4
Infinity Plan Objective	10x/0.25, W.D.10.2mm, Cover Glass 0.17mm	●	●	●	●	●	A52.1090-10
	20x/0.40, W.D.12mm, Cover Glass 0.17mm	●	●	●	●	●	A52.1090-20
	40x/0.65, W.D.0.7mm, Cover Glass 0.17mm	●	●	●	●	●	A52.1090-40
	50x/0.95(Oil), W.D.0.19mm, Cover Glass 0.17mm	○	○	○	○	○	A52.1090-50
	60x/0.8, W.D.0.3mm, Cover Glass 0.17mm	○	○	○	○	○	A52.1090-60
	100x/1.25(Oil), W.D.0.2mm, Cover Glass 0.17mm	●	●	●	●	●	A52.1090-100
NIS60 APO Infinity Plan	20x/0.75, W.D.1.1mm, Cover Glass 0.17mm	○	○	○	○	○	A52.1091-20
	100x/1.45(Oil), W.D.0.13mm, Cover Glass 0.17mm	○	○	○	○	○	A52.1091-100

Working Stage	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Gorilla Glass Insert, Left Handle	○	○			○	A54.1092-GL	
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Gorilla Glass Insert, Right Handle	●	●			○	A54.1092-GR	
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Sapphire Glass Insert, Left Handle				○	○	○	A54.1092-SL
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Sapphire Glass Insert, Right Handle				●	●	○	A54.1092-SR
	Low Position Control Knob, Height Adjustable Up/Down 18mm, Convex Point Guide Mechanism For Easily Put Slide By One Hand, With Tension Adjustable Ring, With Safety Stop Screw	●	●	●	●	●		
Condenser	Swing-Out Condenser NA0.9/0.25	●	●				A56.1091-S	
	Auto Swing-Out Condenser NA0.9/0.25			●	●	●	A56.1091-A	
Focusing	Coaxial Coarse & Fine Focusing, Fine Division 0.001mm, Focusing Range 35mm, Coarse Stroke 37.7mm, Fine Stroke 0.1mm, Can Exchange Hand Wheel Between Left/Right	●	●	●	●	●		
Light Source	Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House	●		●			A56.1090-12V100W	
	Transmit Kohler Illumination, Brightness Adjustable, 3W S-LED, Built-in Main Body		●		●	●	A56.1090-3WLED	
	ECO Function Support Auto Power Off After 30 Mins From Operator Leave To Save Energy	●	●	●	●	●	A56.1090-ECO	
	Auto Brightness Adjust, Brightness For Each Objective Can Be Memorized And Restored When Objective Is Selected							
	A12.1091 Upgradeable To Auto Brightness Adjust, Must Upgrade To A54.1091-6C Coded Nosepiece At Same Time	○	○	●	●	●	A56.1090-AB	
Filter For Transmit Light	Filter Holder On Base, Can Hold 3 Filters	●	●	●	●	●	A56.1092-H	
	Filter LBD	●	●	●	●	●	A56.1092-LBD	
	Filter Green	●	●	●	●	●	A56.1092-G	
	Filter Yellow	●	●	●	●	●	A56.1092-Y	
	Filter ND6	●	●	●	●	●	A56.1092-ND6	
	Filter ND25	●	●	●	●	●	A56.1092-ND25	
Adapter	Eyepiece Adapter Dia.23.2mm	○	○	○	○	○	A55.1090-E	
	C-Mount 1.0x	○	○	○	○	○	A55.1090-1.0x	
	C-Mount 0.5x	○	○	○	○	○	A55.1090-0.5x	
Software	NOMIS Basic Image Processing Software	○	○	○	○	○	A30.1090	
Full-Auto Motorized Control Unit	Including Control Stick, Controller Box, Z Axis Motor Control Part, Motorized X/Y Mechanical Stage							
	--Travel Range X:125mm, Y:75mm,							
	--Minimum Step 0.1um							
	--Re-Position Accurate +/-1.5um							
	--Max Speed 25mm/s							
	--Size: 275x239x44.5mm							
	--Soft Stop, Mechanical Stop, Opto-Electro Switch Stop				○	○	●	A54.1095-A
	--Z Axis Re-Position Accurate: Average +/-1.5um, Near Focus +/-0.1um							
	--Z Axis Max Speed 10r/s							
	--3D Control Stick, 4 Speeds							
	--Connection By USB2.0 & RS232							
--Communication Speed 9600 bits								
Upgrade To Z Axis With Optical Grating Ruler				○	○	○	A54.1095-B	



Dark Field	Dark Field Condenser, N.A. 0.7~0.9, Dry	○	○	○	○	○	A5D.1090-D
	Dark Field Condenser, N.A. 1.25~1.36, Immersion	○	○	○	○	○	A5D.1090-I
	Dark Field Objective, Infinity Plan 100X, For Immersion Dark Field Observation	○	○	○	○	○	A5D.1030-3
	Dark Field Objective, Infinity Plan 100X, With Iris Diaphragm, For Immersion Dark Field Observation	○	○	○	○	○	A5D.1030-4
Polarizing	Polarizer For Transmit Light Source, Swing-Out, On Collector	○	○	○	○	○	A5P.1091-BP
	Analyzer For Transmit Light, Slide With Quartz Wedge Compensator	○	○	○	○	○	A5P.1091-BA
	Upgrade To <u>A15.1091</u> Professional Polarizing Microscope	○	○			○	<u>A15.1091</u>
Phase Contrast	Turret Phase Contrast Condenser, Center Adjustable	○	○	○	○	○	A5C.1090
	Centering Telescope 10x	○	○	○	○	○	A5C.1092
	Infinity Plan Phase Contrast Objective N-PLN PH 10x/0.25	○	○	○	○	○	A5C.1091-10
	Infinity Plan Phase Contrast Objective N-PLN PH 20x/0.40	○	○	○	○	○	A5C.1091-20
	Infinity Plan Phase Contrast Objective N-PLN PH 40x/0.65	○	○	○	○	○	A5C.1091-40
	Infinity Plan Phase Contrast Objective N-PLN PH 100x/1.25(Oil)	○	○	○	○	○	A5C.1091-100
DIC	Polarizer For Transmit Light Source	○	○	○	○	○	A5P.1090-TP
	Turret DIC Condenser	○	○	○	○	○	A5C.1095
	DIC Slide 10x, Used With Semi-APO Fluorescent Objective	○	○	○	○	○	A5C.1095-10
	DIC Slide 20x/40x, Used With Semi-APO Fluorescent Objective	○	○	○	○	○	A5C.1095-2040
	DIC Slide 100x, Used With Semi-APO Fluorescent Objective	○	○	○	○	○	A5C.1095-10
	DIC Slide With Analyzer 10x-20x	○	○	○	○	○	A5C.1095-1020P
	DIC Slide With Analyzer 40x-100x	○	○	○	○	○	A5C.1095-40100P
NIS60 N-PLFN Semi-APO Fluorescent Objective For DIC	10x/0.3, W.D.8.1, Cover Glass 0.17mm	○	○	○	○	○	A5F.1091-10
	20x/0.5, W.D.2.1, Cover Glass 0.17mm	○	○	○	○	○	A5F.1091-20
	40x/0.75, W.D.0.7, Cover Glass 0.17mm	○	○	○	○	○	A5F.1091-40
	100x/1.3, W.D.0.15, Cover Glass 0.17mm	○	○	○	○	○	A5F.1091-100
Fluorescent	Upgrade To <u>A16.1093</u> Fluorescent Microscope	-	-	○	○	○	<u>A16.1093</u>
Other Accessories	Working Stage Holder Bracket	●	●	●	●	●	A54.1096
	Adapter To Adjust Eye Position	○	○	○	○	○	A54.1096-A1
	Adapter To Lower The Stage Position 1"	○	○	○	○	○	A54.1096-A2
	Immersion Oil	●	●	●	●	●	A50.1090-01
	Allen Wrench	●	●	●	●	●	A50.1090-02
	Power Cord	●	●	●	●	●	A50.1090-03
	Short Eye Cover, For Eyepiece	○	○	○	○	○	A50.1090-04
	Long Eye Cover, For Eyepiece	○	○	○	○	○	A50.1090-05
	Eyepiece Micrometer, Cross	○	○	○	○	○	A50.1090-06
	Adapter Ring To Install Eyepiece Micrometer	○	○	○	○	○	A50.1090-07
	USB Cable	○	○	○	○	○	A50.1090-08

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

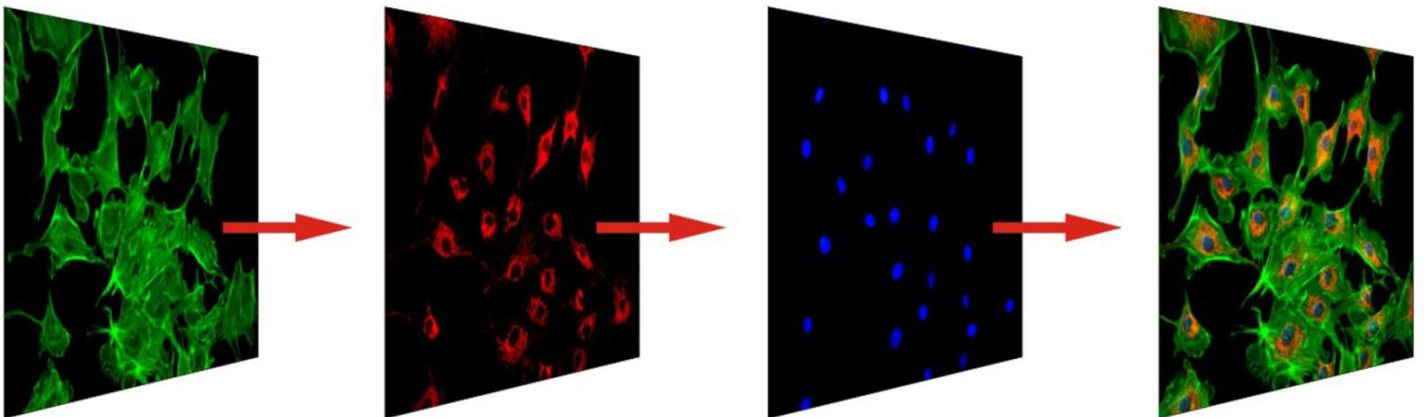
# A16.1093

## Upright Fluorescent Microscope, Semi-APO, Semi-Motorized

OPTO-EDU



Research Level Fluorescent Microscope With 6 Position Turret Disc Epi-Fluorescent Illuminator  
Extra Wide Eyepiece EW10x/22mm Dia.30mm Diopter Adjustable  
Auto 6 Holes Nosepiece With Infinity Plan Objective 4x10x20x40x100x  
Rackless Working Stage With Sapphire Crystal Glass Insert 190x152mm Moving Range 78x54mm  
Auto Brightness Adjust ECO Function Kohler Illumination 24V100W Halogen Or 3W SLED Optional



# Product Specification

A16.1093 Research Level Fluorescent Laboratory Microscope		A16.1093		Cata. No.
		-H	-L	
Optical System	NIS60 Infinity Optical System	●	●	
Observation Method	Bright Field	●	●	
	Dark Field	○	○	
	Polarizing	○	○	
	Phase Contrast	○	○	
	Flourescent	●	●	
	S	○	○	
Main Body	ATL Semi-Auto Body + LED Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust	●	●	A54.1090-ATL
Head	Ergo Tilting Trinocular Head, Inclination 0°~35°, Interpupillary Distance 47-78mm, 3 Level Ligh Split Switch E100:P0/E20:P80/E0:P100	●	●	A53.1090-TT
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●●	●●	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	A51.1090-1022
	EW12.5x/16mm, High Eyepoint	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	A51.1090-2012
Nosepiece	Auto Coded Nosepiece, Sextuple, Backward, Motorized Switch Objectives, Controlled By: 1. Shortcut Button On Right Side Of Base, Can Switch 2 Preseted Objectives Quickly 2. Remote Control Pad In Front Of Base, Press Each Button To Switch Objectives And Adjust The Light Intensity Automatically. 2 Buttons Can Be Self-Defined For Most Commonly Used Objecives, Press Green Button Can Swap Between Them With Slot For Polarizing Compensator Slider Or DIC Slider	●	●	A54.1091-6A
		●	●	
N-PLFN Infinity Plan Semi-APO Fluorescent Objective	PlanF S-APO 4x/0.13, W.D.16.5mm, Cover Glass 0.17mm	●	●	A5F.1091-4
	PlanF S-APO 10x/0.30, W.D.8.1mm, Cover Glass 0.17mm	●	●	A5F.1091-10
	PlanF S-APO 20x/0.50, W.D.2.1mm, Cover Glass 0.17mm	●	●	A5F.1091-20
	PlanF S-APO 40x/0.75, W.D.0.7mm, Cover Glass 0.17mm	●	●	A5F.1091-40
	PlanF S-APO 100x/1.30(Oil), W.D.0.15mm, Cover Glass 0.17mm	●	●	A5F.1091-100
Working Stage	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Sapphire Glass Insert, Left Handle	○	○	A54.1092-SL
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Sapphire Glass Insert, Right Handle	●	●	A54.1092-SR
	Low Position Control Knob, Height Adjustable Up/Down 18mm, Convex Point Guide Mechanism For Easily Put Slide By One Hand, With Tension Adjustable Ring, With Safety Stop Screw	●	●	
Condenser	Auto Swing-Out Condenser NA0.9/0.25	●	●	A56.1091-A
Focusing	Coaxial Coarse & Fine Focusing, Fine Division 0.001mm, Focusing Range 35mm, Coarse Stroke 37.7mm, Fine Stroke 0.1mm, Can Exchange Hand Wheel Between Left/Righ	●	●	
Light Source	Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House	●		A56.1090-12V100W
	Transmit Kohler Illumination, Brightness Adjustable, 3W S-LED, Built-in Main Body		●	A56.1090-3WLED
	ECO Function Support Auto Power Off After 30 Mins From Operator Leave To Save Energy	●	●	A56.1090-ECO
	Auto Brightness Adjust, Brightness For Each Objective Can Be Memorized And Restored When Objective Is Selected	●	●	A56.1090-AB



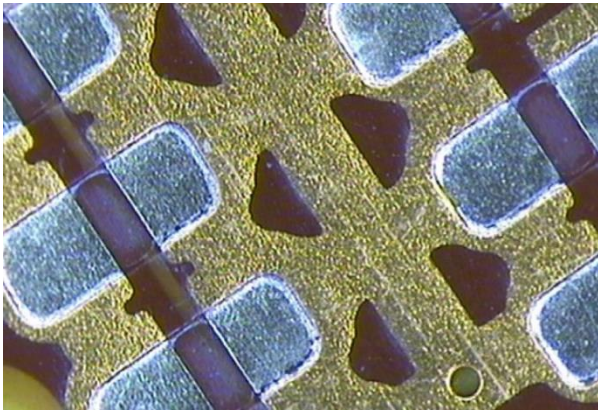
Filter For Transmit Light	Filter Holder On Base, Can Hold 3 Filters	●	●	A56.1092-H
	Filter LBD	●	●	A56.1092-LBD
	Filter Green	●	●	A56.1092-G
	Filter Yellow	●	●	A56.1092-Y
	Filter ND6	●	●	A56.1092-ND6
	Filter ND25	●	●	A56.1092-ND25
Adapter	Eyepiece Adapter Dia.23.2mm	○	○	A55.1090-E
	C-Mount 1.0x	○	○	A55.1090-1.0x
	C-Mount 0.5x	○	○	A55.1090-0.5x
Software	NOMIS Basic Image Processing Software	○	○	A30.1090
Dark Field	Dark Field Condenser, N.A. 0.7~0.9, Dry	○	○	A5D.1090-D
	Dark Field Condenser, N.A. 1.25~1.36, Immersion	○	○	A5D.1090-I
	Dark Field Objective, Infinity Plan 100X, For Immersion Dark Field Observation	○	○	A5D.1030-3
	Dark Field Objective, Infinity Plan 100X, With Iris Diaphragm, For Immersion Dark Field Observation	○	○	A5D.1030-4
Polarizing	Polarizer For Transmit Light Source	○	○	A5P.1091-P
	Analyzer Slide For Transmit Light Source	○	○	A5P.1091-A
	Gout Set: Polarizer, $\lambda$ Slide, Quaterz Wedge Slide	○	○	A5P.1091-T
	Upgrade To <u>A15.1091</u> Professional Polarizing Microscope			<u>A15.1091</u>
Phase Contrast	Turret Phase Contrast Condenser, Center Adjustable	○	○	A5C.1090
	Centering Telescope 10x	○	○	A5C.1092
	Infinity Plan Phase Contrast Objective N-PLN PH 10x/0.25	○	○	A5C.1091-10
	Infinity Plan Phase Contrast Objective N-PLN PH 20x/0.40	○	○	A5C.1091-20
	Infinity Plan Phase Contrast Objective N-PLN PH 40x/0.65	○	○	A5C.1091-40
	Infinity Plan Phase Contrast Objective N-PLN PH 100x/1.25(Oil)	○	○	A5C.1091-100
DIC	Polarizer For Transmit Light Source	○	○	A5P.1090-TP
	Turret DIC Condenser	○	○	A5C.1095
	DIC Slide 10x, Used With Semi-APO Fluorescent Objective	○	○	A5C.1095-10
	DIC Slide 20x/40x, Used With Semi-APO Fluorescent Objective	○	○	A5C.1095-2040
	DIC Slide 100x, Used With Semi-APO Fluorescent Objective	○	○	A5C.1095-10
	DIC Slide With Analyzer 10x-20x	○	○	A5C.1095-1020P
	DIC Slide With Analyzer 40x-100x	○	○	A5C.1095-40100P
Fluorescent Attachment	Reflect Mercury Epi-Fluorescent Illuminator, Turret Disc With 6 Positions For Fluroescent Filter Block, With Protect Barrier	●	●	A5F.1090
	Power Supply Box 220V/110V Interchangeable, Digital Display	●	●	A5F.1090-100WH
	100W Mercury Lamp Housing	●	●	A5F.1090-100WP
	Reflect LED Epi-Fluorescent Illuminator, Turret Disc With 6 Positions For Fluroescent Filter Block, With Protect Barrier	○	○	A5F.1090-LED
	LED Light Source Module, For Fluorescent Filter B	○	○	A5F.1090-LB
	LED Light Source Module, For Fluorescent Filter G	○	○	A5F.1090-LG
	LED Light Source Module, For Fluorescent Filter U	○	○	A5F.1090-LU
	LED Light Source Module, For Fluorescent Filter V	○	○	A5F.1090-LV
	Fluorescent Filter B, BP460-490, BA520, DM500	●	●	A5F.1090-B
	Fluorescent Filter G, BP510-550, BA590, DM570	●	●	A5F.1090-G
	Fluorescent Filter U, BP330-385, BA420, DM400	●	●	A5F.1090-U
	Fluorescent Filter V, BP400-410, BA455, DM455	●	●	A5F.1090-V
	Fluorescent Filter FITC, BP460-495, BA510-550, DM505	○	○	A5F.1090-FITC
	Fluorescent Filter DAPI, BP360-390, BA435-485, DM415	○	○	A5F.1090-DAPI
	Fluorescent Filter TRITC, BP528-553, BA578-633, DM565	○	○	A5F.1090-TRITC
	Fluorescent Filter R, BP620-650, BA670-750, DM660	○	○	A5F.1090-R
	Fluorescent Filter Empty Block	○	○	A5F.1090-E
	Filter ND6	●	●	A5F.1090-ND6
	Filter ND25	●	●	A5F.1090-ND25
	Centering Plate	○	○	A5F.1090-01
Protect Cover For Reflect Fluorescent Light, Placed On Light Collectory On Stand, For Auto Model	○	○	A5F.1090-02	

Other Accessories	Working Stage Holder Bracket	●	●	A54.1096
	Adapter To Adjust Eye Position	○	○	A54.1096-A1
	Adapter To Lower The Stage Position 1"	○	○	A54.1096-A2
	Immersion Oil	●	●	A50.1090-01
	Allen Wrench	●	●	A50.1090-02
	Power Cord	●	●	A50.1090-03
	Short Eye Cover, For Eyepiece	○	○	A50.1090-04
	Long Eye Cover, For Eyepiece	○	○	A50.1090-05
	Eyepiece Micrometer, Cross	○	○	A50.1090-06
	Adapter Ring To Install Eyepiece Micrometer	○	○	A50.1090-07
	USB Cable	○	○	A50.1090-08
Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable				

# A13.1091

Metallurgical Microscope, Reflect, Transmit/Reflect,  
Semi-APO, BF/DF, DIC, PL

OPTO-EDU



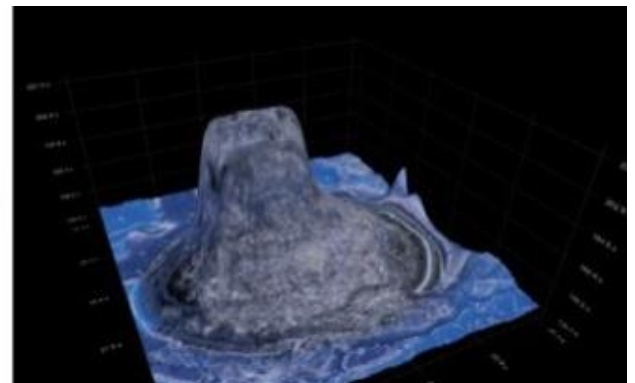
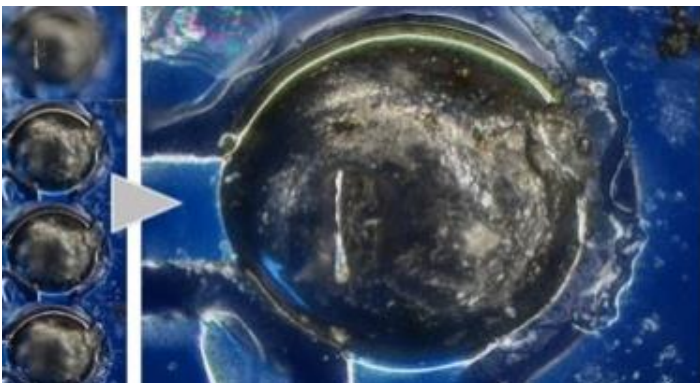
Wafer, Darkfield



Research Level Metallurgical Microscope, Manual, With Reflect, Transmit/Reflect Light  
Manual 6 Holes Nosepiece With NIS45 Infinity Plan Semi-APO BD Objective 5x10x LWD 20x50x100x  
4" Working Stage, Size 210x170mm, Move Range 102x102mm, With Round Crystal Holder, Wafer Holder  
Reflect 12V100W Halogen Illuminator, Bright Field, Polarizing, DIC View  
Transmit 12V100W Halogen Kohler Illumination, Auto Adjust Brightness, ECO Function

## ◆ 3D Depth Of Field Fusion

Provides depth fusion and 3D reconstruction functions





# Product Specification

A13.1091, A13.1093 Metallurgical Microscope, BF/DF, DIC, PL, APO		A13.1091		A13.1093		Cata.No.
		-R	-TR	-R	-TR	
Optical System	NIS45 Infinite Optical System	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	
	Dark Field	●	●	●	●	
	Polarizing	●	●	●	●	
	DIC	●	●	●	●	
Main Body	BH Manual Body + Halogen Illumination.	●	●			A54.1090-BH
	BL Manual Body + LED Illumination.	○	○			A54.1090-BL
	ATH Semi-Auto Body + Halogen Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust			●	●	A54.1090-ATH
	ATL Semi-Auto Body + LED Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust			○	○	A54.1090-ATL
Head	Seidentopf Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm	○	○	○	○	A53.1090-B
	Seidentopf Trinocular Head, Inclined 30°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	○	○	○	○	A53.1090-T
	Ergo Tilting Trinocular Head, Inclination 0°~35°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	●	●	●	●	A53.1090-TT
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●●	●●	●●	●●	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-1022
	EW12.5x/16mm, High Eyepoint	○	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-2012
Nosepiece	Manual Nosepiece, Sextuple, Backward	●	●			A54.1091-6M
	Coded Nosepiece, Sextuple, Backward, For Auto Brightness Adjust	○	○			A54.1091-6C
	Auto Coded Nosepiece, Sextuple, Backward, Motorized Switch Objectives, Controlled By: 1. Shortcut Button On Right Side Of Base, Can Switch 2 Preseted Objectives Quickly 2. Remote Control Pad In Front Of Base, Press Each Button To Switch Objectives And Adjust The Light Intensity Automatically. 2 Buttons Can Be Self-Defined For Most Commonly Used Objecives, Press Green Button Can Swap Between Them			●	●	A54.1091-6A
	With Slot For Polarizing Compensator Slider Or DIC Slider	●	●	●	●	
	Protect Cover For Nosepiece Holes	●	●	●	●	A54.1091-C
NIS45 N-MPFN	BD 5x/0.15, W.D.20mm, No Cover Glass	●	●	●	●	A5M.1091-5
Infinity Plan	BD 10x/0.3, W.D.11mm, No Cover Glass	●	●	●	●	A5M.1091-10
BF/DF Semi-APO	BD 20x/0.45, W.D.3mm, No Cover Glass	○	○	○	○	A5M.1091-20A
	BD LWD 20x/0.4, W.D.12mm, No Cover Glass	●	●	●	●	A5M.1091-20
Metallurgical Objective	BD LWD 50x/0.5, W.D.10.6mm, No Cover Glass	●	●	●	●	A5M.1091-50
	BD LWD 100x/0.8, W.D.3.5mm, No Cover Glass	●	●	●	●	A5M.1091-100
NIS45 BF/DF APO	BD 50x/0.8, W.D.1mm, No Cover Glass	○	○	○	○	A5M.1092-50
	BD 100x/0.9, W.D.1mm, No Cover Glass	○	○	○	○	A5M.1092-100

Working Stage For Metallurgical Microscope	4" Working Stage, Size 210x170mm, Move Range 4"x4" (102x102mm), Right Handle Optional, Hard Oxide Surface, Y Can Be Locked	●	●	●	●	A54.1093-L
	4" Working Stage, Size 210x170mm, Move Range 4"x4" (102x102mm), Left Handle Optional, Hard Oxide Surface, Y Can Be Locked	○	○	○	○	A54.1093-R
	Round Crystal Holder, For 2",3",4" Diameter Crystal	●	●	●	●	A54.1093-H1
	Wafer Holder	●	●	●	●	A54.1093-H2
	Glass Substrate, Size 145(X)x152(Y)mm	●	●	●	●	A54.1093-H3
	Metal Stage Plate, Size 145(X)x152(Y)mm	●	●	●	●	A54.1093-H4
Condenser	LWD Condenser, N.A.0.65, W.D.10.2mm, Center Adjustable, Dual Condenser Lifting Handle	●	●	●	●	A5M.1095
Focusing	Coaxial Coarse & Fine Focusing, Fine Division 0.001mm, Focusing Range 35mm, Coarse Stroke 37.7mm, Fine Stroke 0.1mm, Can Exchange Hand Wheel Between Left/Right,	●	●	●	●	
	Max Sample Space 76mm	●	●	●	●	
	Max Sample Space 56mm		●		●	
Reflect Light Source	Reflect Epi Metallurgical Illuminator, Turret Disc With 6 Positions For Filter Block, Kohler Illumination	●	●	●	●	A5M.1090
	12V100W Halogen Lamp Housing	●	●	●	●	A5M.1090-100W
	BF/DF View Block	●	●	●	●	A5M.1090-BD
	BF1 View Block	●	●	●	●	A5M.1090-B1
	BF2 View Block	●	●	●	●	A5M.1090-B2
Filter For Reflect Light Source	Filter Blue	●	●	●	●	A56.1093-B
	Filter Green	●	●	●	●	A56.1093-G
	Filter Yellow	●	●	●	●	A56.1093-Y
	Filter Forested	●	●	●	●	A56.1093-F
Polarizing	Polarizer For Reflect Light Source	●	●	●	●	A5P.1090-RP
	Analyzer For Reflect Light Source	●	●	●	●	A5P.1090-RA
DIC	Blank Slider	●	●	●	●	A5P.1090-E
	Nomarski DIC Slider For Reflect Light Source	●	●	●	●	A5M.1090-DIC
Transmit Light Source	Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House		●		●	A56.1090-12V100W
	Transmit Kohler Illumination, Brightness Adjustable, 3W S-LED, Built-in Main Body		○		○	A56.1090-3WLED
	ECO Function Support Auto Power Off After 30 Mins From Operator Leave To Save Energy		●		●	A56.1090-ECO
	Auto Brightness Adjust, Brightness For Each Objective Can Be Memorized And Restored When Objective Is Selected A13.1091 Upgradeable To Auto Brightness Adjust, Must Upgrade To A54.1091-6C Coded Nosepiece At Same Time		○		●	A56.1090-AB
Filter For Transmit Light Source	Filter Holder On Base, Can Hold 3 Filters		●		●	A56.1092-H
	Filter LBD		●		●	A56.1092-LBD
	Filter Green		●		●	A56.1092-G
	Filter Yellow		●		●	A56.1092-Y
	Filter ND6		●		●	A56.1092-ND6
	Filter ND25		●		●	A56.1092-ND25
Adapter	Eyepiece Adapter Dia.23.2mm	○	○	○	○	A55.1090-E
	C-Mount 1.0x	○	○	○	○	A55.1090-1.0x
	C-Mount 0.5x	○	○	○	○	A55.1090-0.5x
Software	NOMIS Basic Image Processing Software	○	○	○	○	A30.1090
Other Accessories	Working Stage Holder Bracket	●	●	●	●	A54.1096
	Adapter To Adjust Eye Position	○	○	○	○	A54.1096-A1
	Adapter To Lower The Stage Position 1"	○	○	○	○	A54.1096-A2
	Immersion Oil	○	○	○	○	A50.1090-01
	Allen Wrench	●	●	●	●	A50.1090-02
	Power Cord	●	●	●	●	A50.1090-03
	Short Eye Cover, For Eyepiece	○	○	○	○	A50.1090-04
	Long Eye Cover, For Eyepiece	○	○	○	○	A50.1090-05
	Eyepiece Micrometer, Cross	○	○	○	○	A50.1090-06
	Adapter Ring To Install Eyepiece Micrometer	○	○	○	○	A50.1090-07
USB Cable	○	○	○	○	A50.1090-08	

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

# A13.1093

Metallurgical Microscope, Semi-Auto, Reflect,  
Transmit/Reflect, Semi-APO, BF/DF, DIC, PL

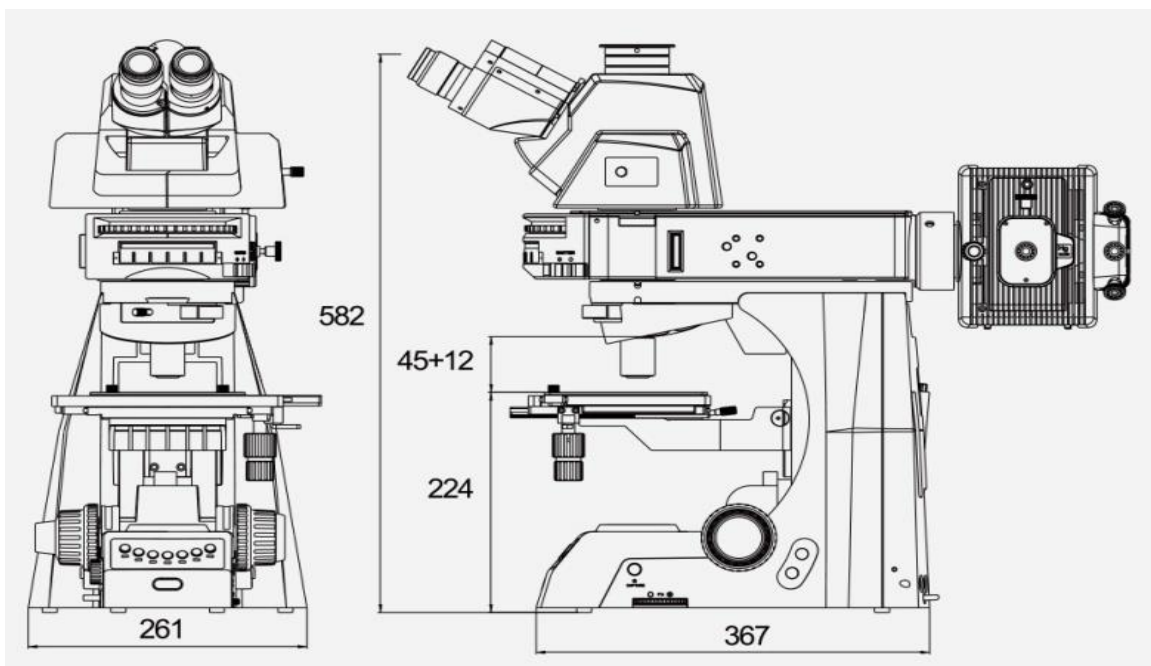
OPTO-EDU



Research Level Metallurgical Microscope Semi-Auto, With Reflect, Transmit/Reflect Light  
Manual 6 Holes Nosepiece With NIS45 Infinity Plan Semi-APO BD Objective 5x10x LWD 20x50x100x  
4" Working Stage, Size 210x170mm, Move Range 102x102mm, With Round Crystal Holder,  
Wafer Holder Etc.

Reflect 12V100W Halogen Illuminator, Bright Field, Polarizing, DIC View

Transmit 12V100W Halogen Kohler Illumination, Auto Adjust Brightness, ECO Function





# Product Specification

A13.1091, A13.1093 Metallurgical Microscope, BF/DF, DIC, PL, APO		A13.1091		A13.1093		Cata.No.
		-R	-TR	-R	-TR	
Optical System	NIS45 Infinite Optical System	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	
	Dark Field	●	●	●	●	
	Polarizing	●	●	●	●	
	DIC	●	●	●	●	
Main Body	BH Manual Body + Halogen Illumination.	●	●			A54.1090-BH
	BL Manual Body + LED Illumination.	○	○			A54.1090-BL
	ATH Semi-Auto Body + Halogen Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust			●	●	A54.1090-ATH
	ATL Semi-Auto Body + LED Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust			○	○	A54.1090-ATL
Head	Seidentopf Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm	○	○	○	○	A53.1090-B
	Seidentopf Trinocular Head, Inclined 30°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	○	○	○	○	A53.1090-T
	Ergo Tilting Trinocular Head, Inclination 0°~35°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	●	●	●	●	A53.1090-TT
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●●	●●	●●	●●	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-1022
	EW12.5x/16mm, High Eyepoint	○	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	A51.1090-2012
Nosepiece	Manual Nosepiece, Sextuple, Backward	●	●			A54.1091-6M
	Coded Nosepiece, Sextuple, Backward, For Auto Brightness Adjust	○	○			A54.1091-6C
	Auto Coded Nosepiece, Sextuple, Backward, Motorized Switch Objectives, Controlled By: 1. Shortcut Button On Right Side Of Base, Can Switch 2 Preseted Objectives Quickly 2. Remote Control Pad In Front Of Base, Press Each Button To Switch Objectives And Adjust The Light Intensity Automatically. 2 Buttons Can Be Self-Defined For Most Commonly Used Objecives, Press Green Button Can Swap Between Them			●	●	A54.1091-6A
	With Slot For Polarizing Compensator Slider Or DIC Slider	●	●	●	●	
	Protect Cover For Nosepiece Holes	●	●	●	●	A54.1091-C
NIS45 N-MPFN	BD 5x/0.15, W.D.20mm, No Cover Glass	●	●	●	●	A5M.1091-5
Infinity Plan	BD 10x/0.3, W.D.11mm, No Cover Glass	●	●	●	●	A5M.1091-10
BF/DF Semi-APO	BD 20x/0.45, W.D.3mm, No Cover Glass	○	○	○	○	A5M.1091-20A
	BD LWD 20x/0.4, W.D.12mm, No Cover Glass	●	●	●	●	A5M.1091-20
Metallurgical Objective	BD LWD 50x/0.5, W.D.10.6mm, No Cover Glass	●	●	●	●	A5M.1091-50
	BD LWD 100x/0.8, W.D.3.5mm, No Cover Glass	●	●	●	●	A5M.1091-100
NIS45 BF/DF APO	BD 50x/0.8, W.D.1mm, No Cover Glass	○	○	○	○	A5M.1092-50
	BD 100x/0.9, W.D.1mm, No Cover Glass	○	○	○	○	A5M.1092-100

Working Stage For Metallurgical Microscope	4" Working Stage, Size 210x170mm, Move Range 4"x4" (102x102mm), Right Handle Optional, Hard Oxide Surface, Y Can Be Locked	●	●	●	●	A54.1093-L
	4" Working Stage, Size 210x170mm, Move Range 4"x4" (102x102mm), Left Handle Optional, Hard Oxide Surface, Y Can Be Locked	○	○	○	○	A54.1093-R
	Round Crystal Holder, For 2",3",4" Diameter Crystal	●	●	●	●	A54.1093-H1
	Wafer Holder	●	●	●	●	A54.1093-H2
	Glass Substrate, Size 145(X)x152(Y)mm	●	●	●	●	A54.1093-H3
	Metal Stage Plate, Size 145(X)x152(Y)mm	●	●	●	●	A54.1093-H4
Condenser	LWD Condenser, N.A.0.65, W.D.10.2mm, Center Adjustable, Dual Condenser Lifting Handle	●	●	●	●	A5M.1095
Focusing	Coaxial Coarse & Fine Focusing, Fine Division 0.001mm, Focusing Range 35mm, Coarse Stroke 37.7mm, Fine Stroke 0.1mm, Can Exchange Hand Wheel Between Left/Right,	●	●	●	●	
	Max Sample Space 76mm	●	●	●	●	
	Max Sample Space 56mm		●		●	
Reflect Light Source	Reflect Epi Metallurgical Illuminator, Turret Disc With 6 Positions For Filter Block, Kohler Illumination	●	●	●	●	A5M.1090
	12V100W Halogen Lamp Housing	●	●	●	●	A5M.1090-100W
	BF/DF View Block	●	●	●	●	A5M.1090-BD
	BF1 View Block	●	●	●	●	A5M.1090-B1
	BF2 View Block	●	●	●	●	A5M.1090-B2
Filter For Reflect Light Source	Filter Blue	●	●	●	●	A56.1093-B
	Filter Green	●	●	●	●	A56.1093-G
	Filter Yellow	●	●	●	●	A56.1093-Y
	Filter Forested	●	●	●	●	A56.1093-F
Polarizing	Polarizer For Reflect Light Source	●	●	●	●	A5P.1090-RP
	Analyzer For Reflect Light Source	●	●	●	●	A5P.1090-RA
DIC	Blank Slider	●	●	●	●	A5P.1090-E
	Nomarski DIC Slider For Reflect Light Source	●	●	●	●	A5M.1090-DIC
Transmit Light Source	Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House		●		●	A56.1090-12V100W
	Transmit Kohler Illumination, Brightness Adjustable, 3W S-LED, Built-in Main Body		○		○	A56.1090-3WLED
	ECO Function Support Auto Power Off After 30 Mins From Operator Leave To Save Energy		●		●	A56.1090-ECO
	Auto Brightness Adjust, Brightness For Each Objective Can Be Memorized And Restored When Objective Is Selected A13.1091 Upgradeable To Auto Brightness Adjust, Must Upgrade To A54.1091-6C Coded Nosepiece At Same Time		○		●	A56.1090-AB
Filter For Transmit Light Source	Filter Holder On Base, Can Hold 3 Filters		●		●	A56.1092-H
	Filter LBD		●		●	A56.1092-LBD
	Filter Green		●		●	A56.1092-G
	Filter Yellow		●		●	A56.1092-Y
	Filter ND6		●		●	A56.1092-ND6
	Filter ND25		●		●	A56.1092-ND25
Adapter	Eyepiece Adapter Dia.23.2mm	○	○	○	○	A55.1090-E
	C-Mount 1.0x	○	○	○	○	A55.1090-1.0x
	C-Mount 0.5x	○	○	○	○	A55.1090-0.5x
Software	NOMIS Basic Image Processing Software	○	○	○	○	A30.1090
Other Accessories	Working Stage Holder Bracket	●	●	●	●	A54.1096
	Adapter To Adjust Eye Position	○	○	○	○	A54.1096-A1
	Adapter To Lower The Stage Position 1"	○	○	○	○	A54.1096-A2
	Immersion Oil	○	○	○	○	A50.1090-01
	Allen Wrench	●	●	●	●	A50.1090-02
	Power Cord	●	●	●	●	A50.1090-03
	Short Eye Cover, For Eyepiece	○	○	○	○	A50.1090-04
	Long Eye Cover, For Eyepiece	○	○	○	○	A50.1090-05
	Eyepiece Micrometer, Cross	○	○	○	○	A50.1090-06
	Adapter Ring To Install Eyepiece Micrometer	○	○	○	○	A50.1090-07
USB Cable	○	○	○	○	A50.1090-08	

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

# A13.1095

Metallurgical Microscope, Full Auto, Reflect, Transmit/Reflect, Semi-APO, BF+DF+DIC+PL

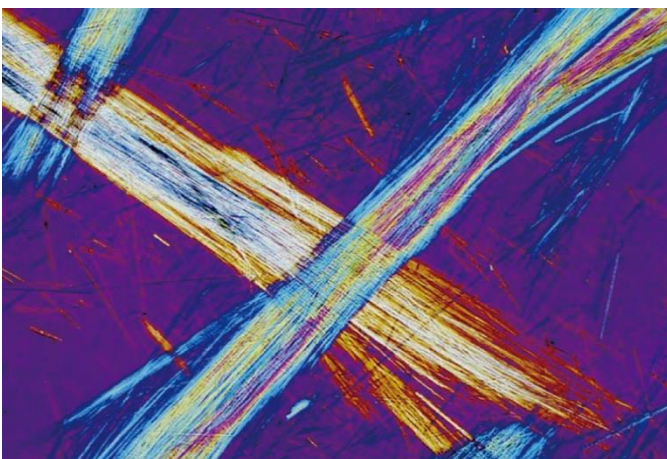
OPTO-EDU



Research Level Metallurgical Microscope Semi-Auto, With Reflect, Transmit/Reflect Light Manual 6 Holes Nosepiece With NIS45 Infinity Plan Semi-APO BD Objective 5x10x LWD 20x50x100x 4" Working Stage, Size 210x170mm, Move Range 102x102mm, With Round Crystal Holder, Wafer Holder Etc.

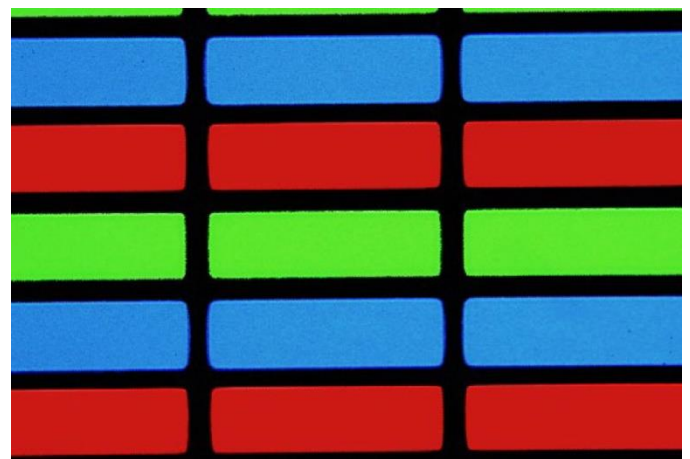
Reflect 12V100W Halogen Illuminator, Bright Field, Polarizing, DIC View

Transmit 12V100W Halogen Kohler Illumination, Auto Adjust Brightness, ECO Function



**Asbestos, Polarized Light**

**Polarizing** Light generated by a set of filters (analyzer and polarizer). The characteristics of the sample directly affect the intensity of the light reflected through the system. It is suitable for metallurgical structures (i.e., growth pattern of graphite on nodular casting iron), minerals, LCDs and semiconductor materials.



**LCD, Transmitted Light Observation**

**Bright Field** Transmit & Reflect View. For transparent specimen such as LCDs, plastics, and glass materials, true transmitted light observation is available by using a variety of condensers. Examining specimen in transmitted brightfield and polarized light can be accomplished all in one convenient system.



# Product Specification

A13.1095 Metallurgical Microscope, Full Auto, Reflect, Transmit/Reflect, Semi-APO, BF+DF+DIC+PL		A13.1095		Cata.No.
		-R	-TR	
Optical System	NIS45 Infinite Optical System	●	●	
Observation Method	Bright Field	●	●	
	Dark Field	●	●	
	Polarizing	●	●	
	DIC	●	●	
Main Body	BH Manual Body + Halogen Illumination.			A54.1090-BH
	BL Manual Body + LED Illumination.			A54.1090-BL
	ATH Semi-Auto Body + Halogen Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust	●	●	A54.1090-ATH
	ATL Semi-Auto Body + LED Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust	○	○	A54.1090-ATL
Head	Seidentopf Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm	○	○	A53.1090-B
	Seidentopf Trinocular Head, Inclined 30°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	○	○	A53.1090-T
	Ergo Tilting Trinocular Head, Inclination 0°~35°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	●	●	A53.1090-TT
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●●	●●	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	A51.1090-1022
	EW12.5x/16mm, High Eyepoint	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	A51.1090-2012
Nosepiece	Manual Nosepiece, Sextuple, Backward			A54.1091-6M
	Coded Nosepiece, Sextuple, Backward, For Auto Brightness Adjust			A54.1091-6C
	Auto Coded Nosepiece, Sextuple, Backward, Motorized Switch Objectives, Controlled By: 1. Shortcut Button On Right Side Of Base, Can Switch 2 Preseted Objectives Quickly 2. Remote Control Pad In Front Of Base, Press Each Button To Switch Objectives And Adjust The Light Intensity Automatically. 2 Buttons Can Be Self-Defined For Most Commonly Used Objecives, Press Green Button Can Swap Between Them With Slot For Polarizing Compensator Slider Or DIC Slider	●	●	A54.1091-6A
	Protect Cover For Nosepiece Holes	●	●	A54.1091-C
NIS45 N-MPFN Infinity Plan BF/DF Semi-APO Metallurgical Objective	BD 5x/0.15, W.D.20mm, No Cover Glass	●	●	A5M.1091-5
	BD 10x/0.3, W.D.11mm, No Cover Glass	●	●	A5M.1091-10
	BD 20x/0.45, W.D.3mm, No Cover Glass	○	○	A5M.1091-20A
	BD LWD 20x/0.4, W.D.12mm, No Cover Glass	●	●	A5M.1091-20
	BD LWD 50x/0.5, W.D.10.6mm, No Cover Glass	●	●	A5M.1091-50
NIS45 BF/DF APO	LWD 100x/0.8, W.D.3.5mm, No Cover Glass	●	●	A5M.1091-100
	BD 50x/0.8, W.D.1mm, No Cover Glass	○	○	A5M.1092-50
Working Stage For Metallurgical Microscope	BD 100x/0.9, W.D.1mm, No Cover Glass	○	○	A5M.1092-100
	Motorized X/Y/Z Working Stage, Size 275x239x44.5mm, Move Range 125x75mm, Minimum step length 0.1um, repeat positioning accuracy ±1.5um, maximum speed 20nm/s, soft limit + mechanical limit + photoelectric switch limit, Z axis repeat positioning accuracy average: ±1.5um, near focus ±0.1um, Z Maximum axis speed 10r/s, three-dimensional controllable remote sensing, four-speed speed, USB2.0 & RS232 communication interface, communication speed 9600, Including Control Stick, Controller Box	●	●	A54.1095

Condenser	LWD Condenser, N.A.0.65, W.D.10.2mm, Center Adjustable, Dual Condenser Lifting Handle	●	●	A5M.1095
Focusing	Coaxial Coarse & Fine Focusing, Fine Division 0.001mm, Focusing Range 35mm, Coarse Stroke 37.7mm, Fine Stroke 0.1mm, Can Exchange Hand Wheel Between Left/Right,	●	●	
	Max Sample Space 76mm	●		
	Max Sample Space 56mm		●	
Reflect Light Source	Reflect Epi Metallurgical Illuminator, Turret Disc With 6 Positions For Filter Block, Kohler Illumination	●	●	A5M.1090
	12V100W Halogen Lamp Housing	●	●	A5M.1090-100W
	BF/DF View Block	●	●	A5M.1090-BD
	BF1 View Block	●	●	A5M.1090-B1
	BF2 View Block	●	●	A5M.1090-B2
Filter For Reflect Light Source	Filter Blue	●	●	A56.1093-B
	Filter Green	●	●	A56.1093-G
	Filter Yellow	●	●	A56.1093-Y
	Filter Forested	●	●	A56.1093-F
Polarizing	Polarizer For Reflect Light Source	●	●	A5P.1090-RP
	Analyzer For Reflect Light Source	●	●	A5P.1090-RA
DIC	Blank Slider	●	●	A5P.1090-E
	Nomarski DIC Slider For Reflect Light Source	●	●	A5M.1090-DIC
Transmit Light Source	Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House		●	A56.1090-12V100W
	Transmit Kohler Illumination, Brightness Adjustable, 3W S-LED, Built-in Main Body		○	A56.1090-3WLED
	ECO Function Support Auto Power Off After 30 Mins From Operator Leave To Save Energy		●	A56.1090-ECO
	Auto Brightness Adjust, Brightness For Each Objective Can Be Memorized And Restored When Objective Is Selected A13.1095 Upgradeable To Auto Brightness Adjust, Must Upgrade To A54.1091-6C Coded Nosepiece At Same Time		●	A56.1090-AB
Filter For Transmit Light Source	Filter Holder On Base, Can Hold 3 Filters		●	A56.1092-H
	Filter LBD		●	A56.1092-LBD
	Filter Green		●	A56.1092-G
	Filter Yellow		●	A56.1092-Y
	Filter ND6		●	A56.1092-ND6
	Filter ND25		●	A56.1092-ND25
Adapter	Eyepiece Adapter Dia.23.2mm	○	○	A55.1090-E
	C-Mount 1.0x	○	○	A55.1090-1.0x
	C-Mount 0.5x	○	○	A55.1090-0.5x
Software	NOMIS Basic Image Processing Software	○	○	A30.1090
Other Accessories	Working Stage Holder Bracket	●	●	A54.1096
	Adapter To Adjust Eye Position	○	○	A54.1096-A1
	Adapter To Lower The Stage Position 1"	○	○	A54.1096-A2
	Immersion Oil	○	○	A50.1090-01
	Allen Wrench	●	●	A50.1090-02
	Power Cord	●	●	A50.1090-03
	Short Eye Cover, For Eyepiece	○	○	A50.1090-04
	Long Eye Cover, For Eyepiece	○	○	A50.1090-05
	Eyepiece Micrometer, Cross	○	○	A50.1090-06
	Adapter Ring To Install Eyepiece Micrometer	○	○	A50.1090-07
USB Cable	○	○	A50.1090-08	
Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable				

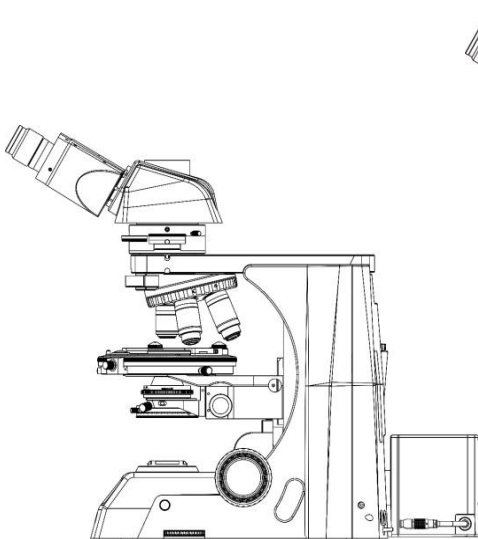
# A15.1091

Polarizing Microscope, Semi-APO, Transmit & Reflect Light

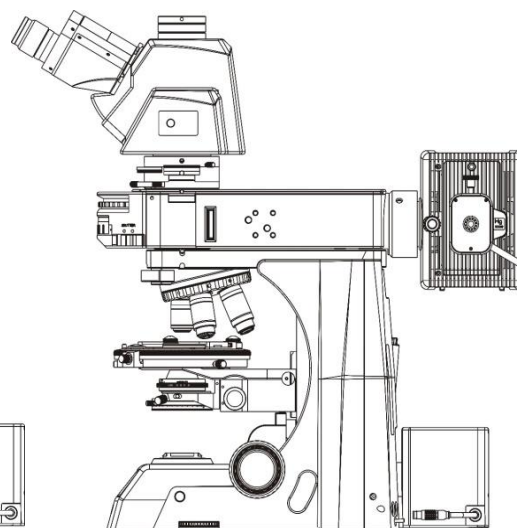
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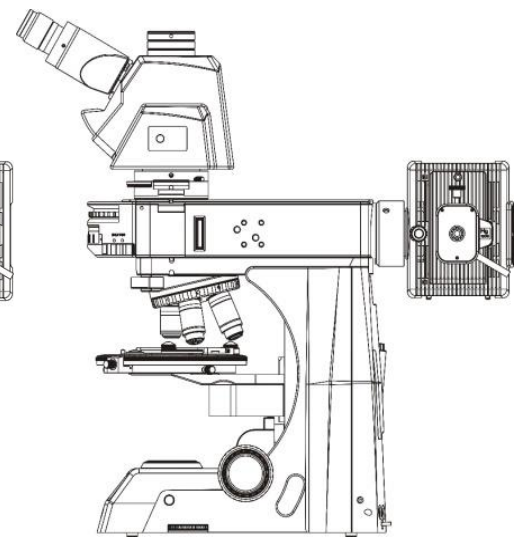
Research Level Polarizing Microscope, Manual, Transmit/Reflect, Semi-APO  
Extra Wide Eyepiece EW10x/25mm Dia.30mm Diopter Adjustable With Lock Pin  
Quintuple Nosepiece Center Adjustable, NIS60 Infinity Plan Stainless Semi-APO PL5x10x20x50x100x  
Round Stage Dia.190mm, With Attachable Moving Stage Range 30x30mm  
Transmit ECO Kohler Illumination 12V100W Halogen, Reflect 12V100W Halogen



A15.1091-T



A15.1091-TR



A15.1091-R



# Product Specification

A15.1091 Series Polarizing Microscope		A15.1091			Cata.No.
		-T	-TR	-R	
Optical System	NIS60 Infinite Optical System	●	●	●	
Observation Method	Bright Field	●	●	●	
	Dark Field,	○	○	○	
	Polarizing	●	●	●	
	Phase Contrast	○	○	○	
	Flourescent	○	○	○	
	DIC	○	○	○	
Main Body	BH Manual Body + Halogen Illumination.	●	●	●	A54.1090-BH
	BL Manual Body + LED Illumination.	○	○	○	A54.1090-BL
	ATH Semi-Auto Body + Halogen Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust	○	○	○	A54.1090-ATH
	ATL Semi-Auto Body + LED Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust	○	○	○	A54.1090-ATL
	Head	Seidentopf Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm	○	○	○
	Seidentopf Trinocular Head, Inclined 30°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	○	○	○	A53.1090-T
	Ergo Tilting Trinocular Head, Inclination 0°~35°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	●	●	●	A53.1090-TT
Eyepiece	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●	●	●	A51.1090-1022
	SW10x/22mm, With Scale Cross, With Locating Pin, For Polarizing	●	●	●	A51.1090-1022S
	SW10x/22mm, With Cross Hair, With Locating Pin, For Polarizing	○	○	○	A51.1090-1022C
	SW10x/22mm, With Grid Plate, With Locating Pin, For Polarizing	○	○	○	A51.1090-1022G
	EW12.5x/16mm, High Eyepoint	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	A51.1090-2012
Nosepiece	Manual Nosepiece, Quintuple, Backward, Center Adjustable	●	●	●	A54.1091-5M
	With Slot For Polarizing Compensator Slider Or DIC Slider	●	●	●	
	Protect Cover For Nosepiece Holes	●	●	●	A54.1091-C
NIS60 Strain-Free Semi-APO Infinity Plan Objective	5x/0.15, W.D.20mm, Semi-APO, PL, No Cover Glass	●	●	●	A5P.1091-5
	10x/0.3, W.D.11mm, Semi-APO, PL, No Cover Glass	●	●	●	A5P.1091-10
	20x/0.45, W.D.3.0mm, Semi-APO, PL, No Cover Glass	●	●	●	A5P.1091-20
	50x/0.8, W.D.1.0mm, Semi-APO, PL, No Cover Glass	●	●	●	A5P.1091-50
	100x/0.9, W.D.1.0mm, Semi-APO, PL, No Cover Glass	●	●	●	A5P.1091-100
Working Stage	High-precision Pre-Adjusted Revolving Round Stage, Diameter 190mm, Center Adjustable, 360° Scale, Minium Division 1° , Minium Reading 6´ by Means of Vernier Scale, 45° Click Stop Knob.	●	●	●	A54.1094
	Attachable Moving Stage, Moving Range 30x30mm	●	●	●	A54.1094-R
Condenser	Swing-Out Condenser NA0.9/0.25	●	●	●	A56.1091-S
Focusing	Coaxial Coarse & Fine Focusing, Fine Division 0.001mm, Focusing Range 35mm, Coarse Stroke 37.7mm, Fine Stroke 0.1mm, Can Exchange Hand Wheel Between Left/Right	●	●	●	

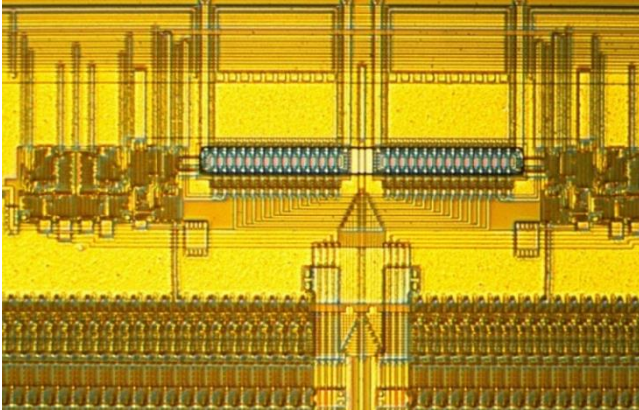
Transmit Light Source	Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House ECO Function Support Auto Power Off After 30 Mins From Operator Leave To Save Energy	●	●	-	A56.1090-12V100W
	Filter Holder On Base, Can Hold 3 Filters	●	●	-	A56.1092-H
	Filter LBD	●	●	-	A56.1092-LBD
	Filter Green	●	●	-	A56.1092-G
	Filter Yellow	●	●	-	A56.1092-Y
	Filter ND6	●	●	-	A56.1092-ND6
	Filter ND25	●	●	-	A56.1092-ND25
Polarizing Attachment	Transmit Polarizer, Attached To Condenser Bottom, 360° Rotatable	●	●	-	A5P.1090-TP
	Reflect Polarizer Slide, Insert In Slot of Reflect Light Source	-	●	●	A5P.1090-RP
	Reflect/Transmit Analyzer Slide, 360° Dial Rotate, Minimum Scale Reading 0.1°	●	●	●	A5P.1090-TRA
	Bertrand Lens Intermediate Unit, With Slot For Compensator Slide	●	●	●	A5P.1090-CB
	λ Compensator Slide	●	●	●	A5P.1090-Cλ
	λ1/4 Compensator Slide	●	●	●	A5P.1090-C1/4λ
	Quartz Wedge Slide	●	●	●	A5P.1090-CQ
	Blank Slide	●	●	●	A5P.1090-CS
Reflect Polarizing Light Source	Reflect Epi Polarizing Illuminator, Turret Disc With 6 Positions For Filter Block, Kohler Illumination	-	●	●	A5P.1090
	12V100W Halogen Lamp Housing	-	●	●	A5P.1090-100W
	BF1 View Block	-	●	●	A5P.1090-B1
	BF2 View Block	-	●	●	A5P.1090-B2
	Circularly Polarized Light Block	-	●	●	A5P.1090-CP
	Filter Blue	-	●	●	A56.1093-B
	Filter Green	-	●	●	A56.1093-G
	Filter Yellow	-	●	●	A56.1093-Y
Adapter	Filter Forested	-	●	●	A56.1093-F
Adapter	Eyepiece Adapter Dia.23.2mm	○	○	○	A55.1090-E
	C-Mount 1.0x	○	○	○	A55.1090-10
	C-Mount 0.5x	○	○	○	A55.1090-05
Other Accessories	Working Stage Holder Bracket	●	●	●	A54.1096
	Adapter To Adjust Eye Position	○	○	○	A54.1096-A1
	Adapter To Lower The Stage Position 1"	○	○	○	A54.1096-A2
	Immersion Oil	○	○	○	A50.1090-01
	Allen Wrench	●	●	●	A50.1090-02
	Power Cord	●	●	●	A50.1090-03
	Short Eye Cover, For Eyepiece	○	○	○	A50.1090-04
	Long Eye Cover, For Eyepiece	○	○	○	A50.1090-05
	Eyepiece Micrometer, Cross	○	○	○	A50.1090-06
	Adapter Ring To Install Eyepiece Micrometer	○	○	○	A50.1090-07
	USB Cable	○	○	○	A50.1090-08

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

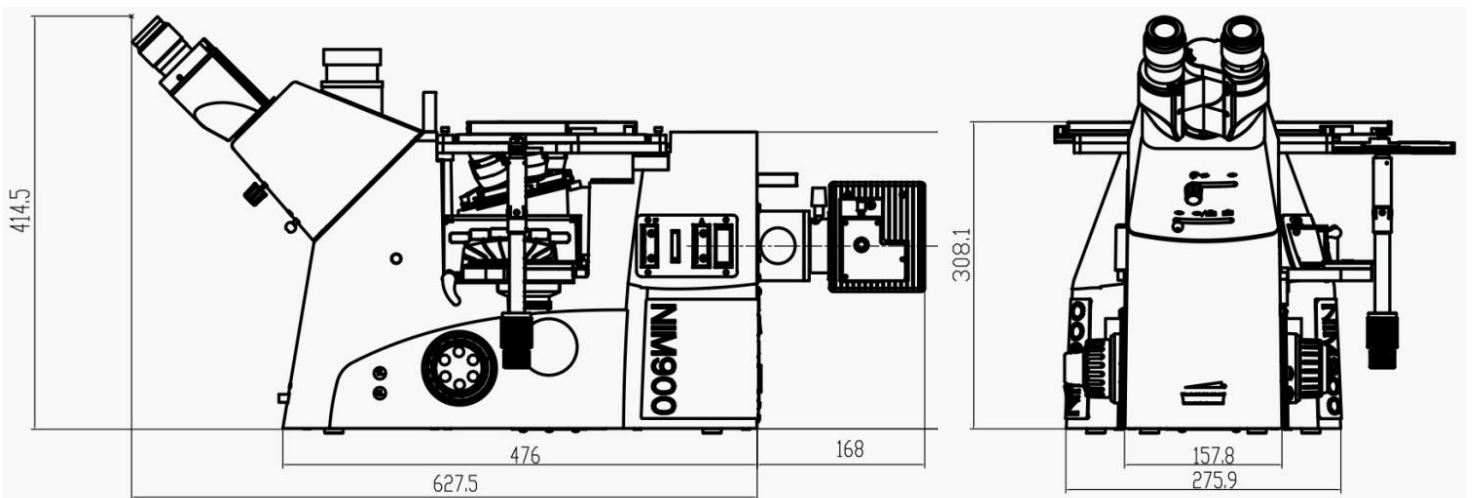
# A13.1096

Inverted Metallurgical Microscope, Semi-APO, BF/DF/PL/FL/DIC

OPTO-EDU



Research Level Inverted Metallurgical Microscope For BF/DF/PL/FL/DIC  
Trinocular Head With Built-in Bertrand Lens SW10x/22mm Eyepiece  
Infinity Plan BF/DF Sem-APO 5x10x20x APO 50x100 Triple Layer Working Stage  
Moving Range 130x85mm, With 3 Holder  
LWD Condensor N.A.0.55 W.D.26mm, With 6 Holes Phase Contrast Disc  
Reflect 12V100W Halogen Light Support Fluorescent Illumination





# Product Specification

A13.1096 Research Level Inverted Fluorescent Microscope			Cata.No.
Optical System	NIS60 Infinite Optical System	●	
Observation Method	Bright Field	●	
	Dark Field	○	
	Polarizing	○	
	Flourescent	○	
	DIC	○	
Head	Seidentopf Trinocular Head, Inclined 45°, Interpupillary Distance 47-78mm, Ligth Split Switch E100:P0/E20:P80/E0:P100, With Built-in Bertrand Lens Which Can Be Used As Centering Telescope	●	
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●	A51.1090-1022
	EW12.5x/17.5mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	A51.1090-2012
Media Lens	Built-in Media Lens Turret, Under Nosepiece, 1.0x, 1.5x Switchable	●	
Nosepiece	Manual Sextuple Nosepiece, With DIC Slot	●	
NIS45 N-MPFN	5x/0.15, W.D.20mm, No Cover Glass, Semi-APO	●	A5M.1091-5
Infinity Plan	10x/0.3, W.D.11mm, No Cover Glass, Semi-APO	●	A5M.1091-10
BF/DF	20x/0.45, W.D.3mm, No Cover Glass, Semi-APO	●	A5M.1091-20
Semi-APO/APO	50x/0.8, W.D.1mm, No Cover Glass, APO	●	A5M.1092-50
Metallurgical Objective	100x/0.9, W.D.1mm, No Cover Glass, APO	●	A5M.1092-100
Working Stage	Three Layer Mechanical Stage, Size 340x230mm, Moving Range 130x85mm, Flexible Knob, Available For Different Size Small Stage Plate, Can Hold Max Weight 30Kgs	●	A54.1098
	Motorized X/Y Axies (Optical Grating Type) Mechanical Stage, Size 325x144mm, Moving Range 130x100mm, Max Speed 10mm/s, Resloution 0.1um, Repeat Accuracy +/-0.5um, Available For Different Size Small Stage Mounted on Top Layer, With Separate Communication/Main Control Box & Stick	○	A54.1098-M
	Metal Plate Dia.20mm	●	A54.1098-M20
	Metal Plate Dia.28mm	●	A54.1098-M28
	Metal Plate Water Drop Shape	●	A54.1098-MW
Focusing	Coaxial Coarse & Fine Focusing, Focusing Range 9mm (Up 2mm, Down 7mm), Coarse Stroke 2mm, Fine Stroke 0.2mm	●	
	Motorized Z Axies (Optical Grating Type) Focusing System, Focusing Range 9mm (Up 7mm, Down 2mm), Focusing Resloution 0.02um With Optical Grating, Movement Repeat Positioning Accuracy +/-0.1um, Prevent Stage Fall Down Function	○	
Adapter	3 Camera Ports, On Both Side Of Main Body And Head, Turret Switch Between: --Trinocular Port Switch E100:P0/E20:P80/E0:P100 --Left Port C-Mount 1.0x E0:P100 --Right Port C-Mount 1.0x E20:P80	●	
	C-Mount 0.4x	○	A55.1095-04
	C-Mount 0.5x	○	A55.1095-05
	C-Mount 1.0x	●	A55.1095-10
Multi Function Turret	Multi Function Turret Under Nosepice, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	●	
Dark Field	Dark Field Block, Put In Multi Function Turret, For Reflect Light Source	○	A5D.1098
Polarizing	Polarizer Light Block, Put In Multi Function Turret	○	A5P.1098-PL
	Circularly Polarized Light Block, Put In Multi Function Turret	○	A5P.1098-CP
	Analyzer Slide, Insert Into Slot On Nosepiece, 360° Rotatable	○	A5P.1098-A

DIC	DIC Slider 5x-20x, Insert Into Slot On Nosepiece	○	A5C.1097-S520
	DIC Slider 50x-100x, Insert Into Slot On Nosepiece	○	A5C.1097-S50100
Reflect Light Source	12V100W Halogen Kohler Illumination, Brightness Adjustable	●	A56.1095-12V100W
	Large Filter Holder Slide With 3 Holes	●	A56.1095-LS
	Field Diaphragm Slide, Center Adjustable,	●	A56.1095-FS
	Small Empty Slide	●	A56.1095-ES
	Aperture Diaphragm Slide	●	A56.1095-AS
	ND6 Filter	●	A56.1095-ND6
	ND25 Filter	●	A56.1095-ND25
Reflect Fluorescent Light Source	100W Mercury HBO Fluorescent Light House, Intelligent Power Supply Box Protect Barrier For UV Light	○	A5F.1095-100W
	10W S-LED Fluorescent Light, 4 Color Bands, Brightness Adjustable By Control Box	○	A5F.1095-10WLED
	Fluorescent Filter B Block, Put In Multi Function Turret	○	A5F.1095-B
	Fluorescent Filter G Block, Put In Multi Function Turret	○	A5F.1095-G
	Fluorescent Filter U Block, Put In Multi Function Turret	○	A5F.1095-U
	Fluorescent Filter V Block, Put In Multi Function Turret	○	A5F.1095-V
Software	NOMIS Basic Image Processing Software	○	A30.1090
Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable			

# A14.1096

Inverted Laboratory Microscope, Semi-Auto, Semi-APO, BF+PH

OPTO-EDU



## Flexible Transmit Illuminator

With retroverted Illuminator, thereby ensuring large space for operation and



Research Level Inverted Biological Microscope For BF/PH/DIC  
Trinocular Head With Built-in Bertrand Lens SW10x/22mm Eyepiece  
Infinity Plan Semi-APO Phase Contrast Objective 10x20x40x  
LWD Condensor N.A.0.55 W.D.26mm, With 6 Holes Phase Contrast Disc  
Transmit 12V100 Halogen Flexible Illuminator Can Retrovert From Optical Path

### ◆ Bright Field Observation

Unique infinity optical system, combined with semi-apochromatic fluorescent objective lens, effectively eliminates field curvature, chromatic aberration, spherical aberration, coma and other imaging problems, the image is brighter, all magnifications can achieve higher super-resolution and flat type





# Product Specification

Research Level Inverted Biological Microscope		A14.10 96	A14.10 97	A16.10 96	A16.10 97	A16.10 98	Cata.No.
Optical System	NIS60 Infinite Optical System, Semi-APO	●	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	●	
	Dark Field	-	-	○	○	○	
	Phase Contrast	●	●	●	●	●	
	Polarizing	○	○	○	○	○	
	Flourescent	○	○	●	●	●	
	DIC	○	○	○	○	○	
LCD Screen	4.3" LCD Information Touch Screen In Front of Main Body, For Easy Use in Dark Working Condition. --Show Objectives In Use In Nosepiece --Show Cubes In Use In Multi Function Turret --Brightness Memorize & Restore Function --Touch To Adjust Brightness --Touch To Set The System	-	●	-	●	○	
Head	Seidentopf Trinocular Head, Inclined 45°, Interpupillary Distance 47-78mm, Ligth Split Switch E100:P0/E20:P80/E0:P100, With Built-in Bertrand Lens Which Can Be Used As Centering Telescope	●	●	●	●	●	
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●	●	●	●	●	A51.1090-1022
	EW12.5x/17.5mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-2012
Media Lens	Built-in Media Lens Turret 1.0x, 1.5x, Under Nosepiece	●	●	●	●	-	
	Built-in Media Lens Turret 1.0x, 1.5x. CF, Under Nosepiece	-	-	-	-	●	
Nosepiece	Manual Sextuple Nosepiece, With DIC Slot	●	-	●	-	-	
	Coded Manual Sextuple Nosepiece, With DIC Slot	-	●	-	●	-	
	Motorized Coded Manual Sextuple Nosepiece, With DIC Slot, With Objective Protection Function When Switch The Objectives	-	-	-	-	●	
N-iPLFN PH Infinity Plan Semi-APO Phase Contrast Objective	4x/0.13, W.D.16.5mm, No Cover Glass	○	○	○	○	○	A5C.1098-4
	10x/0.30, W.D.7.4mm, Cover Glass 1.2mm	●	●	●	●	●	A5C.1098-10
	20x/0.45, W.D.7.5-8.8mm, Cover Glass 0-2mm, With Built-in Correct Ring	●	●	●	●	●	A5C.1098-20
	40x/0.6, W.D.3-4.4mm, Cover Glass 0-2mm, With Built-in Correct Ring	●	●	●	●	●	A5C.1098-40
	60x/0.75, W.D.1.8-2.6mm, Cover Glass 0.1-1.3mm, With Built-in Correct Ring	○	○	○	○	○	A5C.1098-60

Focusing	Coaxial Coarse & Fine Focusing, Focusing Range 9mm (Up 7mm, Down 2mm), Coarse Stroke 2mm, Fine Stroke 0.2mm	●	●	●	●	-	
	Motorized Z Axes (Optical Grating Type) Focusing System, Focusing Range 9mm (Up 7mm, Down 2mm), Focusing Resloution 0.02um With Optical Grating, Movement Repeat Positioning Accuracy +/-0.1um, Prevent Stage Fall Down Function	-	-	-	-	●	
Working Stage	Three Layer Mechanical Stage, Moving Range 130x85mm, Flexible Knob, Available For Different Size Small Stage Mounted on Top Layer	●	●	●	●	-	A54.1098
	Motorized X/Y Axes (Optical Grating Type) Mechanical Stage, Size 325x144mm, Moving Range 130x100mm, Max Speed 10mm/s, Resloution 0.1um, Repeat Accuracy +/- 0.5um, Available For Different Size Small Stage Mounted on Top Layer, With Separate Communication/Main Control Box & Stick	-	-	-	-	●	A54.1098-M
Working Stage	Dia.38mm Holder For Slide & Petri Dish	●	●	●	●	●	A54.1098-38
	Dia.54mm Holder For Petri Dish	●	●	●	●	●	A54.1098-54
	96 Holes Plate Holder	●	●	●	●	●	A54.1098-96
	Terasaki Holder	●	●	●	●	●	A54.1098-TH
	Universal Holder	●	●	●	●	●	A54.1098-UH
Condenser	Long Working Distance Turret Condenser, N.A.0.55, W.D.26mm, With 6 Positions For Phase Contrast Annulus, DIC Annulus, And Bright Field View	●	●	●	●	-	A56.1098
	Motorized Long Working Distance Turret Condenser, N.A.0.55, W.D.26mm, With 6 Positions For Phase Contrast Annulus, DIC Annulus, And Bright Field View	-	-	-	-	●	A56.1098-M
Multi Function Turret	Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	●	●	●	-	-	
	Coded Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	-	-	-	●	-	
	Motorized Coded Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	-	-	-	-	●	
Dark Field	Dark Field Block, Put In Multi Function Turret, For Reflect Light Source	○	○	○	○	○	A5D.1098
Polarizing For Transmit Light	Polarizer Filter On LWD Turret Condenser	○	○	○	○	○	A5P.1098-P
	Analyzer Slide, Insert Into Slot On Nosepiece, 360° Rotatable	○	○	○	○	○	A5P.1098-A
Polarizing For Reflect Light	Polarizer Light Block, Put In Multi Function Turret	○	○	○	○	○	A5P.1098-PL
	Circularly Polarized Light Block, Put In Multi Function Turret	○	○	○	○	○	A5P.1098-CP

Phase Contrast	Phase Contrast Annulus 10x/20x, Put In Turret Condenser	●	●	●	●	●	A5C.1096-1020
	Phase Contrast Annulus 40x, Put In Turret Condenser	●	●	●	●	●	A5C.1096-40
	Phase Contrast Annulus 60x, Put In Turret Condenser	○	○	○	○	○	A5C.1096-60
DIC	DIC Annulus 10x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A10
	DIC Annulus 20x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A20
	DIC Annulus 40x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A40
	DIC Annulus 60x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A60
	DIC Slider 10x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S10
	DIC Slider 20x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S20
	DIC Slider 40x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S40
	DIC Slider 60x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S60
Illumination	Transmit/Reflect Illumination Switch Knob, On Right Side Of Main Body, Press To Switch Transmit And Reflect Switch Light Quickly	●	●	●	●	●	
Transmit	12V100W Halogen Kohler Illumination, Brightness Adjustable,						A56.1095-12V100W
Light Source	Flexible Illuminator Body Can Retrovert From Optical Path For Large Space of Operation And Sample Exchange	●	●	●	●	●	
	10W S-LED Kohler Illumination, Brightness Adjustable	○	○	○	○	○	A56.1095-10WLED
Reflect	Large Filter Holder Slide With 3 Holes	○	○	●	●	●	A56.1095-LS
Light Source	Field Diaphragm Slide, Center Adjustable,	○	○	●	●	●	A56.1095-FS
	Small Empty Slide	○	○	●	●	●	A56.1095-ES
	Aperture Diaphragm Slide	○	○	●	●	●	A56.1095-AS
	Neutral Filter	○	○	●	●	●	A56.1095-NE
Reflect Fluorescent Light Source	Reflect 100W Osram Mercury HBO Fluorescent Light House						A5F.1095-100W
	Intelligent Power Supply Control Box With Barrier To Stop/Recover Fluorescent Illumination Quickly	○	○	●	●	●	
	10W S-LED Fluorescent Light, 4 Color Bands, Brightness Adjustable By Control Box	○	○	○	○	○	A5F.1095-10WLED
	75W Metal Halide Light Source, Life Time 2000 Hours	○	○	○	○	○	A5F.1095-75WM
	Fluorescent Filter B Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-B
	Fluorescent Filter G Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-G
	Fluorescent Filter U Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-U
	Fluorescent Filter V Block, Put In Multi Function Turret	○	○	○	○	○	A5F.1095-V
Metallurgical	Upgrade To <a href="#">A13.1096</a> Inverted Metallurgical Microscope	○	○	○	○	○	<a href="#">A13.1096</a>
Adapter	3 Camera Ports, On Both Side Of Main Body And Head, Turret Switch Between: --Trinocular Port Switch E100:P0/E20:P80/E0:P100	●	●	●	●	●	
	--Left Port C-Mount 1.0x E0:P100						
	--Right Port C-Mount 1.0x E20:P80						
	C-Mount 0.4x	○	○	○	○	○	A55.1095-04
	C-Mount 0.5x	○	○	○	○	○	A55.1095-05
	C-Mount 1.0x	●	●	●	●	●	A55.1095-10
Software	NOMIS Basic Image Processing Software	○	○	○	○	○	A30.1090

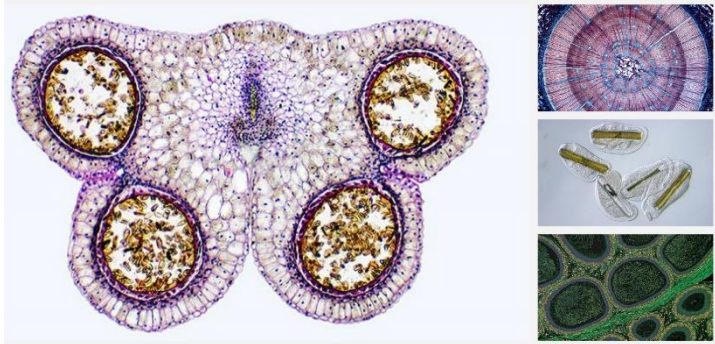
Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable



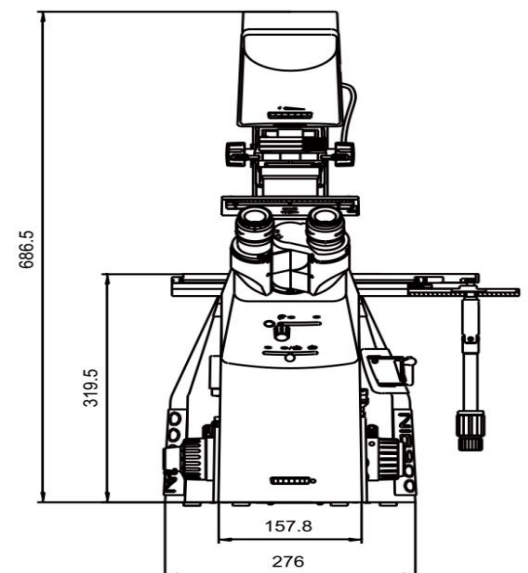
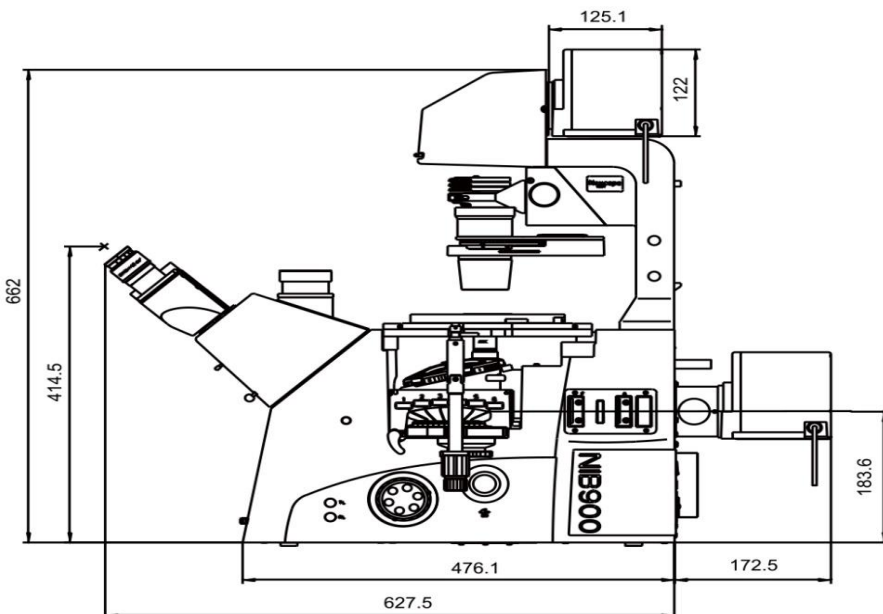
# A14.1097

## Inverted Biological Microscope, Semi-Auto, Semi-APO, BF+PH

**OPTO-EDU**



Research Level Inverted Biological Microscope For BF/PH/DIC  
Trinocular Head With Built-in Bertrand Lens SW10x/22mm Eyepiece  
Infinty Plan Sem-APO Phase Contrast Objective 10x20x40x  
LCD Touch Screen + Coded Sextuple Nosepiece With DIC Slot  
Transmit 12V100 Halogen Flexible Illuminator Can Retrovert From Optical Path



# Product Specification

Research Level Inverted Biological Microscope		A14.10 96	A14.10 97	A16.10 96	A16.10 97	A16.10 98	Cata.No.
Optical System	NIS60 Infinite Optical System, Semi-APO	●	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	●	
	Dark Field	-	-	○	○	○	
	Phase Contrast	●	●	●	●	●	
	Polarizing	○	○	○	○	○	
	Flourescent	○	○	●	●	●	
	DIC	○	○	○	○	○	
LCD Screen	4.3" LCD Information Touch Screen In Front of Main Body, For Easy Use in Dark Working Condition. --Show Objectives In Use In Nosepiece --Show Cubes In Use In Multi Function Turret --Brightness Memorize & Restore Function --Touch To Adjust Brightness --Touch To Set The System	-	●	-	●	○	
Head	Seidentopf Trinocular Head, Inclined 45°, Interpupillary Distance 47-78mm, Ligth Split Switch E100:P0/E20:P80/E0:P100, With Built-in Bertrand Lens Which Can Be Used As Centering Telescope	●	●	●	●	●	
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●	●	●	●	●	A51.1090-1022
	EW12.5x/17.5mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-2012
Media Lens	Built-in Media Lens Turret 1.0x, 1.5x, Under Nosepiece	●	●	●	●	-	
	Built-in Media Lens Turret 1.0x, 1.5x. CF, Under Nosepiece	-	-	-	-	●	
Nosepiece	Manual Sextuple Nosepiece, With DIC Slot	●	-	●	-	-	
	Coded Manual Sextuple Nosepiece, With DIC Slot	-	●	-	●	-	
	Motorized Coded Manual Sextuple Nosepiece, With DIC Slot, With Objective Protection Function When Switch The Objectives	-	-	-	-	●	
N-iPLFN PH Infinity Plan Semi-APO Phase Contrast Objective	4x/0.13, W.D.16.5mm, No Cover Glass	○	○	○	○	○	A5C.1098-4
	10x/0.30, W.D.7.4mm, Cover Glass 1.2mm	●	●	●	●	●	A5C.1098-10
	20x/0.45, W.D.7.5-8.8mm, Cover Glass 0-2mm, With Built-in Correct Ring	●	●	●	●	●	A5C.1098-20
	40x/0.6, W.D.3-4.4mm, Cover Glass 0-2mm, With Built-in Correct Ring	●	●	●	●	●	A5C.1098-40
	60x/0.75, W.D.1.8-2.6mm, Cover Glass 0.1-1.3mm, With Built-in Correct Ring	○	○	○	○	○	A5C.1098-60

Focusing	Coaxial Coarse & Fine Focusing, Focusing Range 9mm (Up 7mm, Down 2mm), Coarse Stroke 2mm, Fine Stroke 0.2mm	●	●	●	●	-	
	Motorized Z Axes (Optical Grating Type) Focusing System, Focusing Range 9mm (Up 7mm, Down 2mm), Focusing Resloution 0.02um With Optical Grating, Movement Repeat Positioning Accuracy +/-0.1um, Prevent Stage Fall Down Function	-	-	-	-	●	
Working Stage	Three Layer Mechanical Stage, Moving Range 130x85mm, Flexible Knob, Available For Different Size Small Stage Mounted on Top Layer	●	●	●	●	-	A54.1098
	Motorized X/Y Axes (Optical Grating Type) Mechanical Stage, Size 325x144mm, Moving Range 130x100mm, Max Speed 10mm/s, Resloution 0.1um, Repeat Accuracy +/- 0.5um, Available For Different Size Small Stage Mounted on Top Layer, With Separate Communication/Main Control Box & Stick	-	-	-	-	●	A54.1098-M
Working Stage	Dia.38mm Holder For Slide & Petri Dish	●	●	●	●	●	A54.1098-38
	Dia.54mm Holder For Petri Dish	●	●	●	●	●	A54.1098-54
	96 Holes Plate Holder	●	●	●	●	●	A54.1098-96
	Terasaki Holder	●	●	●	●	●	A54.1098-TH
	Universal Holder	●	●	●	●	●	A54.1098-UH
Condenser	Long Working Distance Turret Condenser, N.A.0.55, W.D.26mm, With 6 Positions For Phase Contrast Annulus, DIC Annulus, And Bright Field View	●	●	●	●	-	A56.1098
	Motorized Long Working Distance Turret Condenser, N.A.0.55, W.D.26mm, With 6 Positions For Phase Contrast Annulus, DIC Annulus, And Bright Field View	-	-	-	-	●	A56.1098-M
Multi Function Turret	Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	●	●	●	-	-	
	Coded Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	-	-	-	●	-	
	Motorized Coded Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	-	-	-	-	●	
Dark Field	Dark Field Block, Put In Multi Function Turret, For Reflect Light Source	○	○	○	○	○	A5D.1098
Polarizing For Transmit Light	Polarizer Filter On LWD Turret Condenser	○	○	○	○	○	A5P.1098-P
	Analyzer Slide, Insert Into Slot On Nosepiece, 360° Rotatable	○	○	○	○	○	A5P.1098-A
Polarizing For Reflect Light	Polarizer Light Block, Put In Multi Function Turret	○	○	○	○	○	A5P.1098-PL
	Circularly Polarized Light Block, Put In Multi Function Turret	○	○	○	○	○	A5P.1098-CP



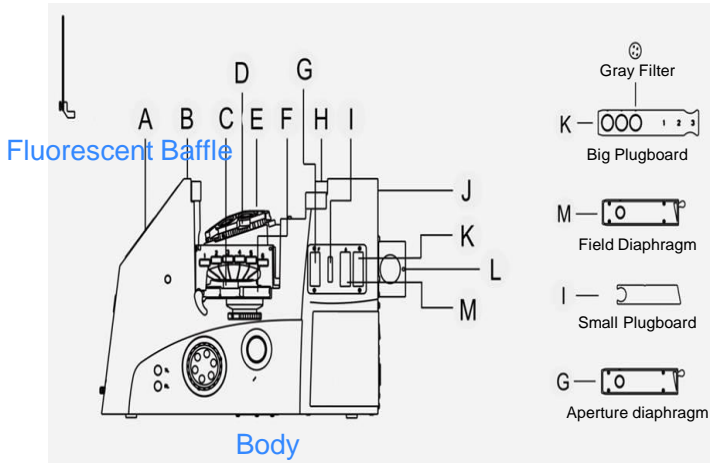
Phase Contrast	Phase Contrast Annulus 10x/20x, Put In Turret Condenser	●	●	●	●	●	A5C.1096-1020
	Phase Contrast Annulus 40x, Put In Turret Condenser	●	●	●	●	●	A5C.1096-40
	Phase Contrast Annulus 60x, Put In Turret Condenser	○	○	○	○	○	A5C.1096-60
DIC	DIC Annulus 10x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A10
	DIC Annulus 20x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A20
	DIC Annulus 40x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A40
	DIC Annulus 60x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A60
	DIC Slider 10x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S10
	DIC Slider 20x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S20
	DIC Slider 40x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S40
	DIC Slider 60x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S60
Illumination	Transmit/Reflect Illumination Switch Knob, On Right Side Of Main Body, Press To Switch Transmit And Reflect Switch Light Quickly	●	●	●	●	●	
Transmit	12V100W Halogen Kohler Illumination, Brightness Adjustable,						A56.1095-12V100W
Light Source	Flexible Illuminator Body Can Retrovert From Optical Path For Large Space of Operation And Sample Exchange	●	●	●	●	●	
	10W S-LED Kohler Illumination, Brightness Adjustable	○	○	○	○	○	A56.1095-10WLED
Reflect	Large Filter Holder Slide With 3 Holes	○	○	●	●	●	A56.1095-LS
Light Source	Field Diaphragm Slide, Center Adjustable,	○	○	●	●	●	A56.1095-FS
	Small Empty Slide	○	○	●	●	●	A56.1095-ES
	Aperture Diaphragm Slide	○	○	●	●	●	A56.1095-AS
	Neutral Filter	○	○	●	●	●	A56.1095-NE
Reflect Fluorescent Light Source	Reflect 100W Osram Mercury HBO Fluorescent Light House						A5F.1095-100W
	Intelligent Power Supply Control Box With Barrier To Stop/Recover Fluorescent Illumination Quickly	○	○	●	●	●	
	10W S-LED Fluorescent Light, 4 Color Bands, Brightness Adjustable By Control Box	○	○	○	○	○	A5F.1095-10WLED
	75W Metal Halide Light Source, Life Time 2000 Hours	○	○	○	○	○	A5F.1095-75WM
	Fluorescent Filter B Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-B
	Fluorescent Filter G Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-G
	Fluorescent Filter U Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-U
	Fluorescent Filter V Block, Put In Multi Function Turret	○	○	○	○	○	A5F.1095-V
Metallurgical	Upgrade To <a href="#">A13.1096</a> Inverted Metallurgical Microscope	○	○	○	○	○	<a href="#">A13.1096</a>
Adapter	3 Camera Ports, On Both Side Of Main Body And Head, Turret Switch Between: --Trinocular Port Switch E100:P0/E20:P80/E0:P100	●	●	●	●	●	
	--Left Port C-Mount 1.0x E0:P100						
	--Right Port C-Mount 1.0x E20:P80						
	C-Mount 0.4x	○	○	○	○	○	A55.1095-04
	C-Mount 0.5x	○	○	○	○	○	A55.1095-05
	C-Mount 1.0x	●	●	●	●	●	A55.1095-10
Software	NOMIS Basic Image Processing Software	○	○	○	○	○	A30.1090

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

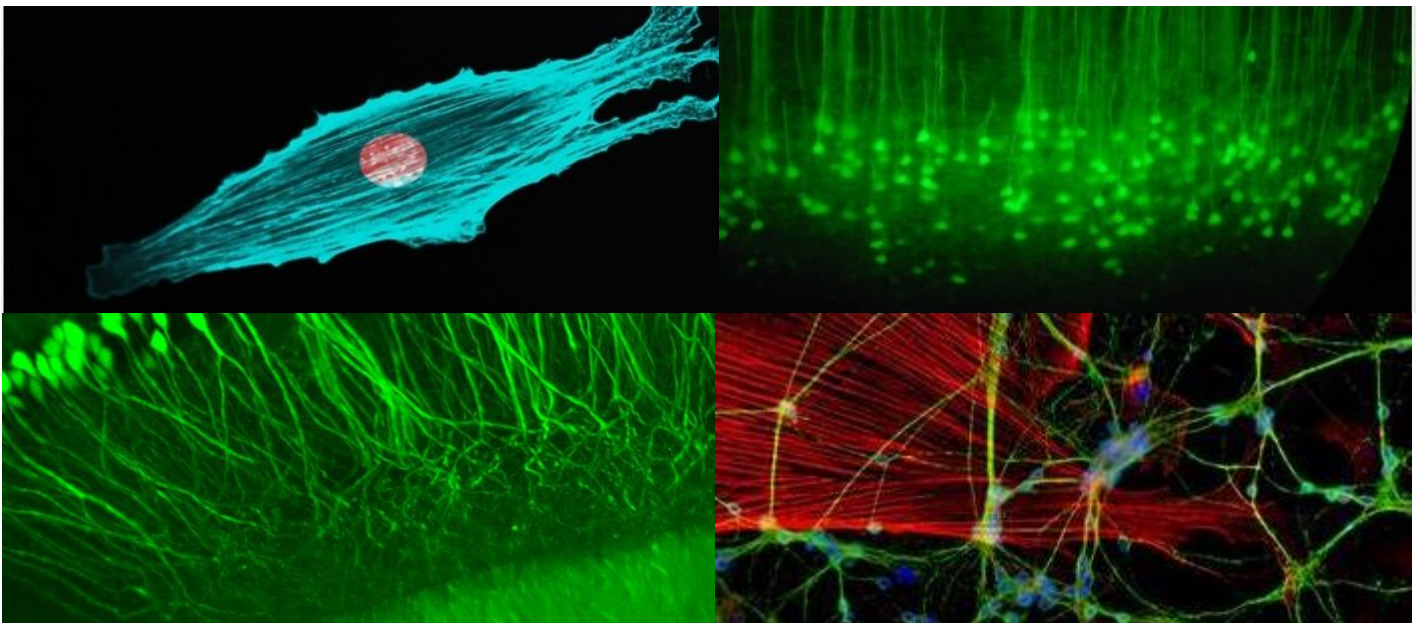
# A16.1096

Inverted Fluorescent Microscope, Manual, Semi-APO,  
BF+PH+FL, DF/PL/DIC

OPTO-EDU



Research Level Inverted Fluorescent Microscope For BF/PH/FL/DIC  
Trinocular Head With Built-in Bertrand Lens SW10x/22mm Eyepiece  
Infinity Plan Sem-APO Phase Contrast Objective 10x20x40x  
LWD Condensor N.A.0.55 W.D.26mm, With 6 Holes Phase Contrast Disc  
Transmit 12V100 Halogen & Reflect 100W Mercury Fluorescent Light With 3 of B,G,UV,V Filters



# Product Specification

Research Level Inverted Biological Microscope		A14.10 96	A14.10 97	A16.10 96	A16.10 97	A16.10 98	Cata.No.
Optical System	NIS60 Infinite Optical System, Semi-APO	●	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	●	
	Dark Field	-	-	○	○	○	
	Phase Contrast	●	●	●	●	●	
	Polarizing	●	●	●	●	●	
	Flourescent	○	○	●	●	●	
	DIC	○	○	○	○	○	
LCD Screen	4.3" LCD Information Touch Screen In Front of Main Body, For Easy Use in Dark Working Condition. --Show Objectives In Use In Nosepiece --Show Cubes In Use In Multi Function Turret --Brightness Memorize & Restore Function --Touch To Adjust Brightness --Touch To Set The System	-	●	-	●	○	
Head	Seidentopf Trinocular Head, Inclined 45°, Interpupillary Distance 47-78mm, Ligth Split Switch E100:P0/E20:P80/E0:P100, With Built-in Bertrand Lens Which Can Be Used As Centering Telescope	●	●	●	●	●	
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●	●	●	●	●	A51.1090-1022
	EW12.5x/17.5mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-2012
Media Lens	Built-in Media Lens Turret 1.0x, 1.5x, Under Nosepiece	●	●	●	●	-	
	Built-in Media Lens Turret 1.0x, 1.5x. CF, Under Nosepiece	-	-	-	-	●	
Nosepiece	Manual Sextuple Nosepiece, With DIC Slot	●	-	●	-	-	
	Coded Manual Sextuple Nosepiece, With DIC Slot	-	●	-	●	-	
	Motorized Coded Manual Sextuple Nosepiece, With DIC Slot, With Objective Protection Function When Switch The Objectives	-	-	-	-	●	
N-iPLFN PH Infinity Plan Semi-APO Phase Contrast Objective	4x/0.13, W.D.16.5mm, No Cover Glass	○	○	○	○	○	A5C.1098-4
	10x/0.30, W.D.7.4mm, Cover Glass 1.2mm	●	●	●	●	●	A5C.1098-10
	20x/0.45, W.D.7.5-8.8mm, Cover Glass 0-2mm, With Built-in Correct Ring	●	●	●	●	●	A5C.1098-20
	40x/0.6, W.D.3-4.4mm, Cover Glass 0-2mm, With Built-in Correct Ring	●	●	●	●	●	A5C.1098-40
	60x/0.75, W.D.1.8-2.6mm, Cover Glass 0.1-1.3mm, With Built-in Correct Ring	○	○	○	○	○	A5C.1098-60



Focusing	Coaxial Coarse & Fine Focusing, Focusing Range 9mm (Up 7mm, Down 2mm), Coarse Stroke 2mm, Fine Stroke 0.2mm	●	●	●	●	-	
	Motorized Z Axes (Optical Grating Type) Focusing System, Focusing Range 9mm (Up 7mm, Down 2mm), Focusing Resloution 0.02um With Optical Grating, Movement Repeat Positioning Accuracy +/-0.1um, Prevent Stage Fall Down Function	-	-	-	-	●	
Working Stage	Three Layer Mechanical Stage, Moving Range 130x85mm, Flexible Knob, Available For Different Size Small Stage Mounted on Top Layer	●	●	●	●	-	A54.1098
	Motorized X/Y Axes (Optical Grating Type) Mechanical Stage, Size 325x144mm, Moving Range 130x100mm, Max Speed 10mm/s, Resloution 0.1um, Repeat Accuracy +/- 0.5um,	-	-	-	-	●	A54.1098-M
	Available For Different Size Small Stage Mounted on Top Layer, With Separate Communication/Main Control Box & Stick						
Working Stage	Dia.38mm Holder For Slide & Petri Dish	●	●	●	●	●	A54.1098-38
	Dia.54mm Holder For Petri Dish	●	●	●	●	●	A54.1098-54
	96 Holes Plate Holder	●	●	●	●	●	A54.1098-96
	Terasaki Holder	●	●	●	●	●	A54.1098-TH
	Universal Holder	●	●	●	●	●	A54.1098-UH
Condenser	Long Working Distance Turret Condenser, N.A.0.55, W.D.26mm,	●	●	●	●	-	A56.1098
	With 6 Positions For Phase Contrast Annulus, DIC Annulus, And Bright Field View						
	Motorized Long Working Distance Turret Condenser, N.A.0.55, W.D.26mm, With 6 Positions For Phase Contrast Annulus, DIC Annulus, And Bright Field View	-	-	-	-	●	A56.1098-M
Multi Function Turret	Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	●	●	●	-	-	
	Coded Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	-	-	-	●	-	
	Motorized Coded Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	-	-	-	-	●	
Dark Field	Dark Field Block, Put In Multi Function Turret, For Reflect Light Source	○	○	○	○	○	A5D.1098
Polarizing For Transmit Light	Polarizer Filter On LWD Turret Condenser	●	●	●	●	●	A5P.1098-P
	Analyzer Slide, Insert Into Slot On Nosepiece, 360° Rotatable	●	●	●	●	●	A5P.1098-A
Polarizing For Reflect Light	Polarizer Light Block, Put In Multi Function Turret	○	○	○	○	○	A5P.1098-PL
	Circularly Polarized Light Block, Put In Multi Function Turret	○	○	○	○	○	A5P.1098-CP

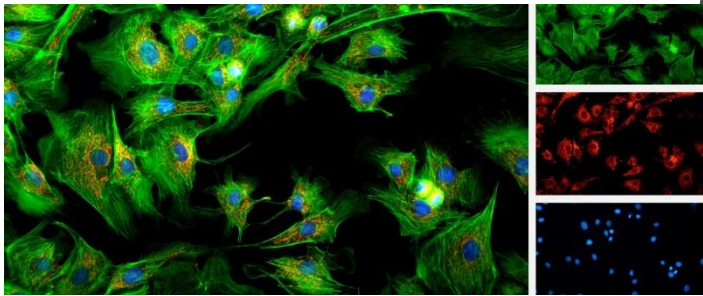
Phase Contrast	Phase Contrast Annulus 10x/20x, Put In Turret Condenser	●	●	●	●	●	A5C.1096-1020
	Phase Contrast Annulus 40x, Put In Turret Condenser	●	●	●	●	●	A5C.1096-40
	Phase Contrast Annulus 60x, Put In Turret Condenser	○	○	○	○	○	A5C.1096-60
DIC	DIC Annulus 10x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A10
	DIC Annulus 20x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A20
	DIC Annulus 40x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A40
	DIC Annulus 60x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A60
	DIC Slider 10x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S10
	DIC Slider 20x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S20
	DIC Slider 40x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S40
	DIC Slider 60x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S60
Illumination	Transmit/Reflect Illumination Switch Knob, On Right Side Of Main Body, Press To Switch Transmit And Reflect Switch Light Quickly	●	●	●	●	●	
Transmit	12V100W Halogen Kohler Illumination, Brightness Adjustable,						
Light Source	Flexible Illuminator Body Can Retrovert From Optical Path For Large Space of Operation And Sample Exchange	●	●	●	●	●	A56.1095-12V100W
	10W S-LED Kohler Illumination, Brightness Adjustable	○	○	○	○	○	A56.1095-10WLED
Reflect	Large Filter Holder Slide With 3 Holes	○	○	●	●	●	A56.1095-LS
Light Source	Field Diaphragm Slide, Center Adjustable,	○	○	●	●	●	A56.1095-FS
	Small Empty Slide	○	○	●	●	●	A56.1095-ES
	Aperture Diaphragm Slide	○	○	●	●	●	A56.1095-AS
	Neutral Filter	○	○	●	●	●	A56.1095-NE
Reflect Fluorescent Light Source	Reflect 100W Osram Mercury HBO Fluorescent Light House						
	Intelligent Power Supply Control Box With Barrier To Stop/Recover Fluorescent Illumination Quickly	○	○	●	●	●	A5F.1095-100W
	10W S-LED Fluorescent Light, 4 Color Bands, Brightness Adjustable By Control Box	○	○	○	○	○	A5F.1095-10WLED
	75W Metal Halide Light Source, Life Time 2000 Hours	○	○	○	○	○	A5F.1095-75WM
	Fluorescent Filter B Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-B
	Fluorescent Filter G Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-G
	Fluorescent Filter U Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-U
	Fluorescent Filter V Block, Put In Multi Function Turret	○	○	○	○	○	A5F.1095-V
Metallurgical	Upgrade To <a href="#">A13.1096</a> Inverted Metallurgical Microscope	○	○	○	○	○	<a href="#">A13.1096</a>
Adapter	3 Camera Ports, On Both Side Of Main Body And Head, Turret Switch Between:						
	--Trinocular Port Switch E100:P0/E20:P80/E0:P100	●	●	●	●	●	
	--Left Port C-Mount 1.0x E0:P100						
	--Right Port C-Mount 1.0x E20:P80						
	C-Mount 0.4x	○	○	○	○	○	A55.1095-04
	C-Mount 0.5x	○	○	○	○	○	A55.1095-05
	C-Mount 1.0x	●	●	●	●	●	A55.1095-10
Software	NOMIS Basic Image Processing Software	○	○	○	○	○	A30.1090

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

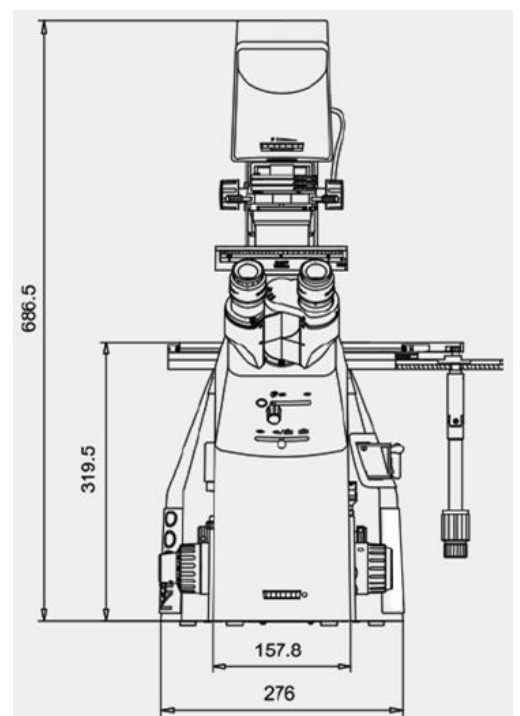
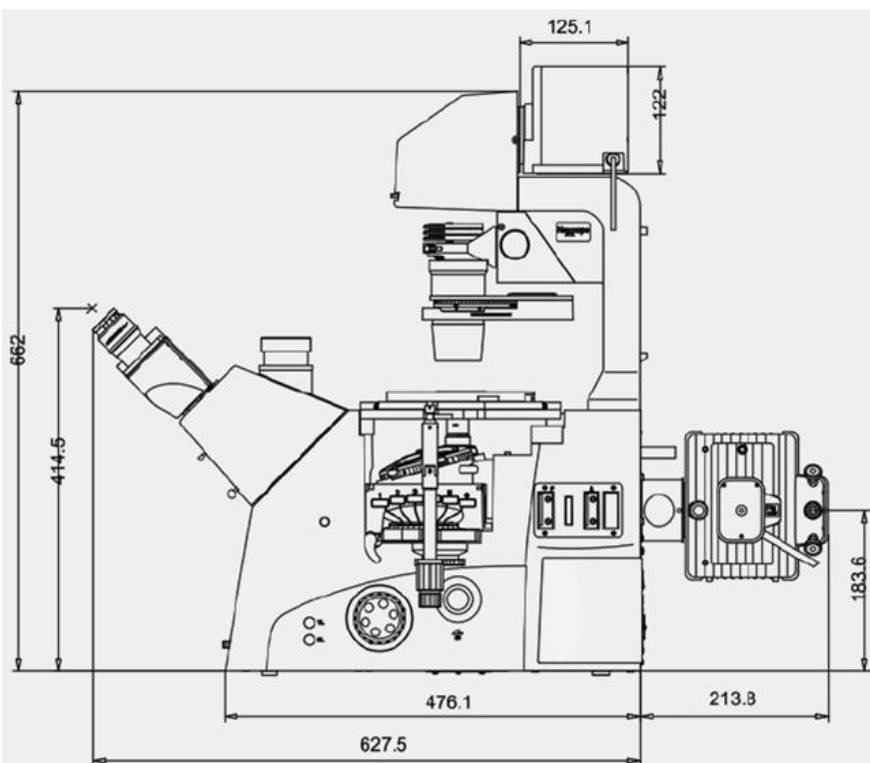
# A16.1097

Inverted Fluorescent Microscope, Semi-Auto,  
Semi-APO, BF+PH+FL, DF/PL/DIC

OPTO-EDU



Research Level Inverted Fluorescent Microscope For BF/PH/FL/DIC  
Trinocular Head With Built-in Bertrand Lens SW10x/22mm Eyepiece  
Infinity Plan Sem-APO Phase Contrast Objective 10x20x40x  
LCD Touch Screen + Coded Sextuple Nosepiece + Coded 6 Position Fluorescent Disc  
Transmit 12V100 Halogen & Reflect 100W Mercury Fluorescent Light With 3 of B,G,UV,V Filters





# Product Specification

Research Level Inverted Biological Microscope		A14.10 96	A14.10 97	A16.10 96	A16.10 97	A16.10 98	Cata.No.
Optical System	NIS60 Infinite Optical System, Semi-APO	●	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	●	
	Dark Field	-	-	○	○	○	
	Phase Contrast	●	●	●	●	●	
	Polarizing	●	●	●	●	●	
	Flourescent	○	○	●	●	●	
	DIC	○	○	○	○	○	
LCD Screen	4.3" LCD Information Touch Screen In Front of Main Body, For Easy Use in Dark Working Condition. --Show Objectives In Use In Nosepiece --Show Cubes In Use In Multi Function Turret --Brightness Memorize & Restore Function --Touch To Adjust Brightness --Touch To Set The System	-	●	-	●	○	
Head	Seidentopf Trinocular Head, Inclined 45°, Interpupillary Distance 47-78mm, Ligth Split Switch E100:P0/E20:P80/E0:P100, With Built-in Bertrand Lens Which Can Be Used As Centering Telescope	●	●	●	●	●	
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●	●	●	●	●	A51.1090-1022
	EW12.5x/17.5mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-2012
Media Lens	Built-in Media Lens Turret 1.0x, 1.5x, Under Nosepiece	●	●	●	●	-	
	Built-in Media Lens Turret 1.0x, 1.5x. CF, Under Nosepiece	-	-	-	-	●	
Nosepiece	Manual Sextuple Nosepiece, With DIC Slot	●	-	●	-	-	
	Coded Manual Sextuple Nosepiece, With DIC Slot	-	●	-	●	-	
	Motorized Coded Manual Sextuple Nosepiece, With DIC Slot, With Objective Protection Function When Switch The Objectives	-	-	-	-	●	
N-iPLFN PH Infinity Plan Semi-APO Phase Contrast Objective	4x/0.13, W.D.16.5mm, No Cover Glass	○	○	○	○	○	A5C.1098-4
	10x/0.30, W.D.7.4mm, Cover Glass 1.2mm	●	●	●	●	●	A5C.1098-10
	20x/0.45, W.D.7.5-8.8mm, Cover Glass 0-2mm, With Built-in Correct Ring	●	●	●	●	●	A5C.1098-20
	40x/0.6, W.D.3-4.4mm, Cover Glass 0-2mm, With Built-in Correct Ring	●	●	●	●	●	A5C.1098-40
	60x/0.75, W.D.1.8-2.6mm, Cover Glass 0.1-1.3mm, With Built-in Correct Ring	○	○	○	○	○	A5C.1098-60

Focusing	Coaxial Coarse & Fine Focusing, Focusing Range 9mm (Up 7mm, Down 2mm), Coarse Stroke 2mm, Fine Stroke 0.2mm	●	●	●	●	-	
	Motorized Z Axes (Optical Grating Type) Focusing System, Focusing Range 9mm (Up 7mm, Down 2mm), Focusing Resloution 0.02um With Optical Grating, Movement Repeat Positioning Accuracy +/-0.1um, Prevent Stage Fall Down Function	-	-	-	-	●	
Working Stage	Three Layer Mechanical Stage, Moving Range 130x85mm, Flexible Knob, Available For Different Size Small Stage Mounted on Top Layer	●	●	●	●	-	A54.1098
	Motorized X/Y Axes (Optical Grating Type) Mechanical Stage, Size 325x144mm, Moving Range 130x100mm, Max Speed 10mm/s, Resloution 0.1um, Repeat Accuracy +/- 0.5um,	-	-	-	-	●	A54.1098-M
	Available For Different Size Small Stage Mounted on Top Layer, With Separate Communication/Main Control Box & Stick						
Working Stage	Dia.38mm Holder For Slide & Petri Dish	●	●	●	●	●	A54.1098-38
	Dia.54mm Holder For Petri Dish	●	●	●	●	●	A54.1098-54
	96 Holes Plate Holder	●	●	●	●	●	A54.1098-96
	Terasaki Holder	●	●	●	●	●	A54.1098-TH
	Universal Holder	●	●	●	●	●	A54.1098-UH
Condenser	Long Working Distance Turret Condenser, N.A.0.55, W.D.26mm,	●	●	●	●	-	A56.1098
	With 6 Positions For Phase Contrast Annulus, DIC Annulus, And Bright Field View						
	Motorized Long Working Distance Turret Condenser, N.A.0.55, W.D.26mm, With 6 Positions For Phase Contrast Annulus, DIC Annulus, And Bright Field View	-	-	-	-	●	A56.1098-M
Multi Function Turret	Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	●	●	●	-	-	
	Coded Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	-	-	-	●	-	
	Motorized Coded Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	-	-	-	-	●	
Dark Field	Dark Field Block, Put In Multi Function Turret, For Reflect Light Source	○	○	○	○	○	A5D.1098
Polarizing For Transmit Light	Polarizer Filter On LWD Turret Condenser	●	●	●	●	●	A5P.1098-P
	Analyzer Slide, Insert Into Slot On Nosepiece, 360° Rotatable	●	●	●	●	●	A5P.1098-A
Polarizing For Reflect Light	Polarizer Light Block, Put In Multi Function Turret	○	○	○	○	○	A5P.1098-PL
	Circularly Polarized Light Block, Put In Multi Function Turret	○	○	○	○	○	A5P.1098-CP

Phase Contrast	Phase Contrast Annulus 10x/20x, Put In Turret Condenser	●	●	●	●	●	A5C.1096-1020
	Phase Contrast Annulus 40x, Put In Turret Condenser	●	●	●	●	●	A5C.1096-40
	Phase Contrast Annulus 60x, Put In Turret Condenser	○	○	○	○	○	A5C.1096-60
DIC	DIC Annulus 10x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A10
	DIC Annulus 20x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A20
	DIC Annulus 40x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A40
	DIC Annulus 60x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A60
	DIC Slider 10x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S10
	DIC Slider 20x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S20
	DIC Slider 40x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S40
	DIC Slider 60x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S60
Illumination	Transmit/Reflect Illumination Switch Knob, On Right Side Of Main Body, Press To Switch Transmit And Reflect Switch Light Quickly	●	●	●	●	●	
Transmit	12V100W Halogen Kohler Illumination, Brightness Adjustable,						
Light Source	Flexible Illuminator Body Can Retrovert From Optical Path For Large Space of Operation And Sample Exchange	●	●	●	●	●	A56.1095-12V100W
	10W S-LED Kohler Illumination, Brightness Adjustable	○	○	○	○	○	A56.1095-10WLED
Reflect	Large Filter Holder Slide With 3 Holes	○	○	●	●	●	A56.1095-LS
Light Source	Field Diaphragm Slide, Center Adjustable,	○	○	●	●	●	A56.1095-FS
	Small Empty Slide	○	○	●	●	●	A56.1095-ES
	Aperture Diaphragm Slide	○	○	●	●	●	A56.1095-AS
	Neutral Filter	○	○	●	●	●	A56.1095-NE
Reflect Fluorescent Light Source	Reflect 100W Osram Mercury HBO Fluorescent Light House						
	Intelligent Power Supply Control Box With Barrier To Stop/Recover Fluorescent Illumination Quickly	○	○	●	●	●	A5F.1095-100W
	10W S-LED Fluorescent Light, 4 Color Bands, Brightness Adjustable By Control Box	○	○	○	○	○	A5F.1095-10WLED
	75W Metal Halide Light Source, Life Time 2000 Hours	○	○	○	○	○	A5F.1095-75WM
	Fluorescent Filter B Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-B
	Fluorescent Filter G Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-G
	Fluorescent Filter U Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-U
	Fluorescent Filter V Block, Put In Multi Function Turret	○	○	○	○	○	A5F.1095-V
Metallurgical	Upgrade To <a href="#">A13.1096</a> Inverted Metallurgical Microscope	○	○	○	○	○	<a href="#">A13.1096</a>
Adapter	3 Camera Ports, On Both Side Of Main Body And Head, Turret Switch Between:						
	--Trinocular Port Switch E100:P0/E20:P80/E0:P100	●	●	●	●	●	
	--Left Port C-Mount 1.0x E0:P100						
	--Right Port C-Mount 1.0x E20:P80						
	C-Mount 0.4x	○	○	○	○	○	A55.1095-04
	C-Mount 0.5x	○	○	○	○	○	A55.1095-05
	C-Mount 1.0x	●	●	●	●	●	A55.1095-10
Software	NOMIS Basic Image Processing Software	○	○	○	○	○	A30.1090

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable



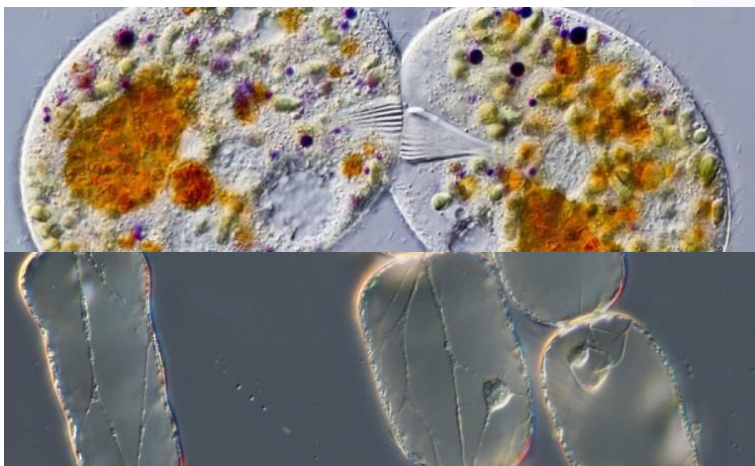
# A16.1098

Full Motorized Inverted Fluorescent Microscope,  
Full Auto, Semi-APO, BF+PH+FL, DF/PL/DIC

OPTO-EDU



Research Level Full Motorized Inverted Fluorescent Microscope For BF/PH/FL/DIC  
Motorized Sextuple Nosepiece With DIC Slot, Infintiy Plan Sem-APO PH10x20x40x  
Motorized Triple Layer Working Stage Moving Range 130x85mm, With 3 Holder  
Motorized LWD Condensor N.A.0.55 W.D.26mm, With 6 Holes Phase Contrast Disc  
Motorized 6 Position Fluorescent Disc, With 3 Filters



# Product Specification

Research Level Inverted Biological Microscope		A14.10 96	A14.10 97	A16.10 96	A16.10 97	A16.10 98	Cata.No.
Optical System	NIS60 Infinite Optical System, Semi-APO	●	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	●	
	Dark Field	-	-	○	○	○	
	Phase Contrast	●	●	●	●	●	
	Polarizing	●	●	●	●	●	
	Flourescent	○	○	●	●	●	
	DIC	○	○	○	○	○	
LCD Screen	4.3" LCD Information Touch Screen In Front of Main Body, For Easy Use in Dark Working Condition. --Show Objectives In Use In Nosepiece --Show Cubes In Use In Multi Function Turret --Brightness Memorize & Restore Function --Touch To Adjust Brightness --Touch To Set The System	-	●	-	●	○	
Head	Seidentopf Trinocular Head, Inclined 45°, Interpupillary Distance 47-78mm, Ligth Split Switch E100:P0/E20:P80/E0:P100, With Built-in Bertrand Lens Which Can Be Used As Centering Telescope	●	●	●	●	●	
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●	●	●	●	●	A51.1090-1022
	EW12.5x/17.5mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	A51.1090-2012
Media Lens	Built-in Media Lens Turret 1.0x, 1.5x, Under Nosepiece	●	●	●	●	-	
	Built-in Media Lens Turret 1.0x, 1.5x. CF, Under Nosepiece	-	-	-	-	●	
Nosepiece	Manual Sextuple Nosepiece, With DIC Slot	●	-	●	-	-	
	Coded Manual Sextuple Nosepiece, With DIC Slot	-	●	-	●	-	
	Motorized Coded Manual Sextuple Nosepiece, With DIC Slot, With Objective Protection Function When Switch The Objectives	-	-	-	-	●	
N-iPLFN PH Infinity Plan Semi-APO Phase Contrast Objective	4x/0.13, W.D.16.5mm, No Cover Glass	○	○	○	○	○	A5C.1098-4
	10x/0.30, W.D.7.4mm, Cover Glass 1.2mm	●	●	●	●	●	A5C.1098-10
	20x/0.45, W.D.7.5-8.8mm, Cover Glass 0-2mm, With Built-in Correct Ring	●	●	●	●	●	A5C.1098-20
	40x/0.6, W.D.3-4.4mm, Cover Glass 0-2mm, With Built-in Correct Ring	●	●	●	●	●	A5C.1098-40
	60x/0.75, W.D.1.8-2.6mm, Cover Glass 0.1-1.3mm, With Built-in Correct Ring	○	○	○	○	○	A5C.1098-60

Focusing	Coaxial Coarse & Fine Focusing, Focusing Range 9mm (Up 7mm, Down 2mm), Coarse Stroke 2mm, Fine Stroke 0.2mm	●	●	●	●	-	
	Motorized Z Axies (Optical Grating Type) Focusing System, Focusing Range 9mm (Up 7mm, Down 2mm), Focusing Resloution 0.02um With Optical Grating, Movement Repeat Positioning Accuracy +/-0.1um, Prevent Stage Fall Down Function	-	-	-	-	●	
Working Stage	Three Layer Mechanical Stage, Moving Range 130x85mm, Flexible Knob, Available For Different Size Small Stage Mounted on Top Layer	●	●	●	●	-	A54.1098
	Motorized X/Y Axies (Optical Grating Type) Mechanical Stage, Size 325x144mm, Moving Range 130x100mm, Max Speed 10mm/s, Resloution 0.1um, Repeat Accuracy +/- 0.5um, Available For Different Size Small Stage Mounted on Top Layer, With Separate Communication/Main Control Box & Stick	-	-	-	-	●	A54.1098-M
Working Stage	Dia.38mm Holder For Slide & Petri Dish	●	●	●	●	●	A54.1098-38
	Dia.54mm Holder For Petri Dish	●	●	●	●	●	A54.1098-54
	96 Holes Plate Holder	●	●	●	●	●	A54.1098-96
	Terasaki Holder	●	●	●	●	●	A54.1098-TH
	Universal Holder	●	●	●	●	●	A54.1098-UH
Condenser	Long Working Distance Turret Condenser, N.A.0.55, W.D.26mm, With 6 Positions For Phase Contrast Annulus, DIC Annulus, And Bright Field View	●	●	●	●	-	A56.1098
	Motorized Long Working Distance Turret Condenser, N.A.0.55, W.D.26mm, With 6 Positions For Phase Contrast Annulus, DIC Annulus, And Bright Field View	-	-	-	-	●	A56.1098-M
Multi Function Turret	Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	●	●	●	-	-	
	Coded Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	-	-	-	●	-	
	Motorized Coded Multi Function Turret Under Nosepiece, With 6 Positions For Cubes Of Bright Field, Dark Field, Phase Contrast, Polarizing, Fluorescent View, Turning The Disc To Easily Switch Observation Methods	-	-	-	-	●	
Dark Field	Dark Field Block, Put In Multi Function Turret, For Reflect Light Source	○	○	○	○	○	A5D.1098
Polarizing For Transmit Light	Polarizer Filter On LWD Turret Condenser	●	●	●	●	●	A5P.1098-P
	Analyzer Slide, Insert Into Slot On Nosepiece, 360° Rotatable	●	●	●	●	●	A5P.1098-A
Polarizing For Reflect Light	Polarizer Light Block, Put In Multi Function Turret	○	○	○	○	○	A5P.1098-PL
	Circularly Polarized Light Block, Put In Multi Function Turret	○	○	○	○	○	A5P.1098-CP



Phase Contrast	Phase Contrast Annulus 10x/20x, Put In Turret Condenser	●	●	●	●	●	A5C.1096-1020
	Phase Contrast Annulus 40x, Put In Turret Condenser	●	●	●	●	●	A5C.1096-40
	Phase Contrast Annulus 60x, Put In Turret Condenser	○	○	○	○	○	A5C.1096-60
DIC	DIC Annulus 10x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A10
	DIC Annulus 20x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A20
	DIC Annulus 40x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A40
	DIC Annulus 60x, Put In LWD Turret Condenser	○	○	○	○	○	A5C.1097-A60
	DIC Slider 10x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S10
	DIC Slider 20x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S20
	DIC Slider 40x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S40
	DIC Slider 60x, Insert Into Slot On Nosepiece	○	○	○	○	○	A5C.1097-S60
Illumination	Transmit/Reflect Illumination Switch Knob, On Right Side Of Main Body, Press To Switch Transmit And Reflect Switch Light Quickly	●	●	●	●	●	
Transmit Light Source	12V100W Halogen Kohler Illumination, Brightness Adjustable, Flexible Illuminator Body Can Retrovert From Optical Path For Large Space of Operation And Sample Exchange	●	●	●	●	●	A56.1095-12V100W
	10W S-LED Kohler Illumination, Brightness Adjustable	○	○	○	○	○	A56.1095-10WLED
Reflect Light Source	Large Filter Holder Slide With 3 Holes	○	○	●	●	●	A56.1095-LS
	Field Diaphragm Slide, Center Adjustable, Small Empty Slide	○	○	●	●	●	A56.1095-FS
	Aperture Diaphragm Slide	○	○	●	●	●	A56.1095-ES
	Neutral Filter	○	○	●	●	●	A56.1095-AS
		○	○	●	●	●	A56.1095-NE
Reflect Fluorescent Light Source	Reflect 100W Osram Mercury HBO Fluorescent Light House Intelligent Power Supply Control Box With Barrier To Stop/Recover Fluorescent Illumination Quickly	○	○	●	●	●	A5F.1095-100W
	10W S-LED Fluorescent Light, 4 Color Bands, Brightness Adjustable By Control Box	○	○	○	○	○	A5F.1095-10WLED
	75W Metal Halide Light Source, Life Time 2000 Hours	○	○	○	○	○	A5F.1095-75WM
	Fluorescent Filter B Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-B
	Fluorescent Filter G Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-G
	Fluorescent Filter U Block, Put In Multi Function Turret	○	○	●	●	●	A5F.1095-U
	Fluorescent Filter V Block, Put In Multi Function Turret	○	○	○	○	○	A5F.1095-V
Metallurgical	Upgrade To <a href="#">A13.1096</a> Inverted Metallurgical Microscope	○	○	○	○	○	<a href="#">A13.1096</a>
Adapter	3 Camera Ports, On Both Side Of Main Body And Head, Turret Switch Between: --Trinocular Port Switch E100:P0/E20:P80/E0:P100 --Left Port C-Mount 1.0x E0:P100 --Right Port C-Mount 1.0x E20:P80	●	●	●	●	●	
	C-Mount 0.4x	○	○	○	○	○	A55.1095-04
	C-Mount 0.5x	○	○	○	○	○	A55.1095-05
	C-Mount 1.0x	●	●	●	●	●	A55.1095-10
	Software	NOMIS Basic Image Processing Software	○	○	○	○	○

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

# A17.1091

## Multi Viewing Research Laboratory Microscope, 10 People, Manual

OPTO-EDU



Research Level Multi Viewing Laboratory Microscope For BF/DF/PH/PL/FL/DIC  
Extra Wide Eyepiece EW10x/25mm Dia.30mm Diopter Adjustable  
6 Holes Nosepiece With Infinity Plan Objective 4x10x20x40x100x  
Rackless Working Stage With Gorilla Glass 190x152mm Moving Range 78x54mm  
ECO Function Kohler Illumination 24V100W Halogen Or 3W SLED Optional



# Product Specification

A17.1091 Multi Viewing Research Laboratory Microscope		2	2R	2L	3	5	10	Cata.No.
Optical System	NIS60 Infinity Optical System	●	●	●	●	●	●	
Observation Method	Bright Field	●	●	●	●	●	●	
	Dark Field	○	○	○	○	○	○	
	Polarizing	○	○	○	○	○	○	
	Phase Contrast	○	○	○	○	○	○	
	Flourescent DIC	○	○	○	○	○	○	
Main Body	Manual Body + Halogen Illumination(LED Illumination Optional).						●	A54.1090-BH
	ATH Semi-Auto Body + Halogen Illumination(LED Illumination Optional). Auto Nosepiece + Auto Condenser + Auto Brightness Adjust	●	●	●	●	●		A54.1090-ATH
Head	Seidentopf Trinocular Head, Inclined 30°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100						●	A53.1090-T
	Ergo Tilting Trinocular Head, Inclination 0°~35°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	●	●	●	●	●		A53.1090-TT
Multi Viewing Head	2 Heads Opsite	●						
	2 Heads Right Side		●					
	2 Heads Left Side			●				
	3 Heads, Trinocular				●			
	5 Heads, Trinocular					●		
	Deca Heads, Trinocular						●	
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●●	●●	●●	●●	●●	●●	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	○	A51.1090-1022
	EW12.5x/16mm, High Eyepoint	○	○	○	○	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	○	○	○	○	A51.1090-2012
Nosepiece	Manual Nosepiece, Quintuple, Backward, Center Adjustable							A54.1091-5M
	Manual Nosepiece, Sextuple, Backward						●	A54.1091-6M
	Coded Nosepiece, Sextuple, Backward, For Auto Brightness Adjust						○	A54.1091-6C
	Auto Coded Nosepiece, Sextuple, Backward, Motorized Switch Objectives, Controlled By: 1. Shortcut Button On Right Side Of Base, Can Switch 2 Preseted Objectives Quickly 2. Remote Control Pad In Front Of Base, Press Each Button To Switch Objectives And Adjust The Light Intensity Automatically. 2 Buttons Can Be Self-Defined For Most Commonly Used Objecives, Press Green Button Can Swap Between Them	●	●	●	●	●	○	A54.1091-6A
	With Slot For Polarizing Compensator Slider Or DIC Slider	●	●	●	●	●	●	
	Protect Cover For Nosepiece Holes	●	●	●	●	●	●	



NIS60 N-PLN Infinity Plan Objective	2x/0.06, W.D.7.5mm, Cover Glass 0.17mm	○	○	○	○	○	○	A52.1090-2
	4x/0.10, W.D.30mm, Cover Glass 0.17mm	●	●	●	●	●	●	A52.1090-4
	10x/0.25, W.D.10.2mm, Cover Glass 0.17mm	●	●	●	●	●	●	A52.1090-10
	20x/0.40, W.D.12mm, Cover Glass 0.17mm	●	●	●	●	●	●	A52.1090-20
	40x/0.65, W.D.0.7mm, Cover Glass 0.17mm	●	●	●	●	●	●	A52.1090-40
	50x/0.95(Oil), W.D.0.19mm, Cover Glass 0.17mm	○	○	○	○	○	○	A52.1090-50
	60x/0.8, W.D.0.3mm, Cover Glass 0.17mm	○	○	○	○	○	○	A52.1090-60
NIS60 APO Infinity Plan	100x/1.25(Oil), W.D.0.2mm, Cover Glass 0.17mm	●	●	●	●	●	●	A52.1090-100
	20x/0.75, W.D.1.1mm, Cover Glass 0.17mm	○	○	○	○	○	○	A52.1091-20
Working Stage	100x/1.45(Oil), W.D.0.13mm, Cover Glass 0.17mm	○	○	○	○	○	○	A52.1091-100
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Gorilla Glass Insert, Left Handle							○ A54.1092-GL
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Gorilla Glass Insert, Right Handle							● A54.1092-GR
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Sapphire Glass Insert, Left Handle	○	○	○	○	○		A54.1092-SL
	Double Layer Mechanical Stage Full Size 302x152mm, Stage Table Size 190x152mm, Moving Range 78x32mm, Double Slide Holder, With Sapphire Glass Insert, Right Handle	●	●	●	●	●		A54.1092-SR
Low Position Control Knob, Height Adjustable Up/Down 18mm, Convex Point Guide Mechanism For Easily Put Slide By One Hand, With Tension Adjustable Ring, With Safety Stop Screw	●	●	●	●	●	●		
Condenser	Swing-Out Condenser NA0.9/0.25							● A56.1091-S
	Auto Swing-Out Condenser NA0.9/0.25	●	●	●	●	●	●	A56.1091-A
Focusing	Coaxial Coarse & Fine Focusing, Fine Division 0.001mm, Focusing Range 35mm, Coarse Stroke 37.7mm, Fine Stroke 0.1mm, Can Exchange Hand Wheel Between Left/Right	●	●	●	●	●	●	
Light Source	Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House	●	●	●	●			● A56.1090-12V100W
	Transmit Kohler Illumination, Brightness Adjustable, 3W S-LED, Built-in Main Body						●	A56.1090-3WLED
	ECO Function Support Auto Power Off After 30 Mins From Operator Leave To Save Energy	●	●	●	●	●	●	A56.1090-ECO
	Auto Brightness Adjust, Brightness For Each Objective Can Be Memorized And Restored When Objective Is Selected	●	●	●	●	●	○	A56.1090-AB
Filter For Transmit Light	A12.1091 Upgradeable To Auto Brightness Adjust, Must Upgrade To A54.1091-6C Coded Nosepiece At Same Time							
	Filter Holder On Base, Can Hold 3 Filters	●	●	●	●	●	●	A56.1092-H
	Filter LBD	●	●	●	●	●	●	A56.1092-LBD
	Filter Green	●	●	●	●	●	●	A56.1092-G
	Filter Yellow	●	●	●	●	●	●	A56.1092-Y
	Filter ND6	●	●	●	●	●	●	A56.1092-ND6
Filter ND25	●	●	●	●	●	●	A56.1092-ND25	
Adapter	Eyepiece Adapter Dia.23.2mm	○	○	○	○	○	○	A55.1090-E
	C-Mount 1.0x	○	○	○	○	○	○	A55.1090-1.0x
	C-Mount 0.5x	○	○	○	○	○	○	A55.1090-0.5x
Software	NOMIS Basic Image Processing Software	○	○	○	○	○	○	A30.1090

Full-Auto Motorized Control Unit	Including Control Stick, Controller Box, Z Axis Moto Control Part, Motorized X/Y Mechanical Stage --Travel Range X:125mm, Y:75mm, --Minimum Step 0.1um --Re-Position Accurate +/-1.5um --Max Speed 25mm/s --Size: 275x239x44.5mm --Soft Stop, Mechanical Stop, Opto-Electro Switch Stop --Z Axis Re-Position Accurate: Average +/-1.5um, Near Focus +/-0.1um --Z Axis Max Speed 10r/s --3D Control Stick, 4 Speeds --Connection By USB2.0 & RS232 --Communication Speed 9600 bits	○	○	○	○	○	A54.1095-A
	Upgrade To Z Axis With Optical Grating Ruler	○	○	○	○	○	A54.1095-B
Dark Field	Dark Field Condenser, N.A. 0.7~0.9, Dry	○	○	○	○	○	A5D.1090-D
	Dark Field Condenser, N.A. 1.25~1.36, Immersion	○	○	○	○	○	A5D.1090-I
	Dark Field Objective, Infinity Plan 100X, For Immersion Dark Field Observation	○	○	○	○	○	A5D.1030-3
	Dark Field Objective, Infinity Plan 100X, With Iris Diaphragm, For Immersion Dark Field Observation	○	○	○	○	○	A5D.1030-4
Polarizing	Polarizer For Transmit Light Source	○	○	○	○	○	A5P.1091-P
	Analyzer Slide For Transmit Light Source	○	○	○	○	○	A5P.1091-A
Phase Contrast	Turret Phase Contrast Condenser, Center Adjustable	○	○	○	○	○	A5C.1090
	Centering Telescope 10x	○	○	○	○	○	A5C.1092
	Infinity Plan Phase Contrast Objective N-PLN PH 10x/0.25	○	○	○	○	○	A5C.1091-10
	Infinity Plan Phase Contrast Objective N-PLN PH 20x/0.40	○	○	○	○	○	A5C.1091-20
	Infinity Plan Phase Contrast Objective N-PLN PH 40x/0.65	○	○	○	○	○	A5C.1091-40
DIC	Infinity Plan Phase Contrast Objective N-PLN PH 100x/1.25(Oil)	○	○	○	○	○	A5C.1091-100
	Polarizer For Transmit Light Source	○	○	○	○	○	A5P.1090-TP
	Turret DIC Condenser	○	○	○	○	○	A5C.1095
	DIC Slide 10x, Used With Semi-APO Fluorescent Objective	○	○	○	○	○	A5C.1095-10
	DIC Slide 20x/40x, Used With Semi-APO Fluorescent Objective	○	○	○	○	○	A5C.1095-2040
	DIC Slide 100x, Used With Semi-APO Fluorescent Objective	○	○	○	○	○	A5C.1095-10
	DIC Slide With Analyzer 10x-20x	○	○	○	○	○	A5C.1095-1020P
DIC Slide With Analyzer 40x-100x	○	○	○	○	○	A5C.1095-40100P	
NIS60 N-PLFN Semi-APO Fluorescent Objective For DIC	10x/0.3, W.D.8.1, Cover Glass 0.17mm	○	○	○	○	○	A5F.1091-10
	20x/0.5, W.D.2.1, Cover Glass 0.17mm	○	○	○	○	○	A5F.1091-20
	40x/0.75, W.D.0.7, Cover Glass 0.17mm	○	○	○	○	○	A5F.1091-40
	100x/1.3, W.D.0.15, Cover Glass 0.17mm	○	○	○	○	○	A5F.1091-100
Other Accessories	Working Stage Holder Bracket	●	●	●	●	●	A54.1096
	Adapter To Adjust Eye Position	○	○	○	○	○	A54.1096-A1
	Adapter To Lower The Stage Position 1"	○	○	○	○	○	A54.1096-A2
	Immersion Oil	●	●	●	●	●	A50.1090-01
	Allen Wrench	●	●	●	●	●	A50.1090-02
	Power Cord	●	●	●	●	●	A50.1090-03
	Short Eye Cover, For Eyepiece	○	○	○	○	○	A50.1090-04
	Long Eye Cover, For Eyepiece	○	○	○	○	○	A50.1090-05
	Eyepiece Micrometer, Cross	○	○	○	○	○	A50.1090-06
	Adapter Ring To Install Eyepiece Micrometer	○	○	○	○	○	A50.1090-07
	USB Cable	○	○	○	○	○	A50.1090-08

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable

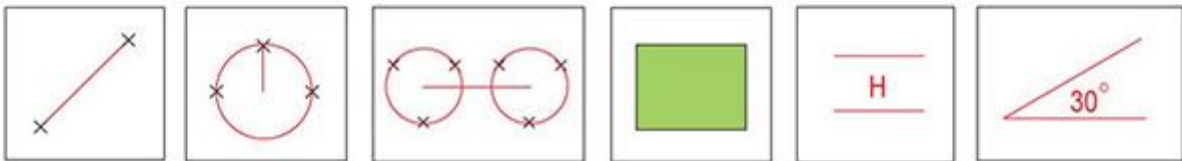
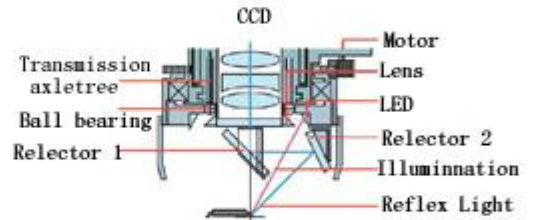
# A21.0401

## 3D Zoom Mono Video Microscope

**OPTO-EDU**



0.65x-4.5x 3D Microscope Body  
 Big Depth Of Field, High Resolution Ratio  
 LED Light Source, 45°/55° Observe Module Group  
 3D Image In Focus And Electric Motor Control  
 Used Extensively In Surface Board Of SMT、PCB、BGA



### A21.0401 3D Zoom Mono Video Microscope

Magnification	0.65x-4.5x 3D Microscope Body
Body	Use 360° All-direction Microscopes Obtain Much Big Depth Of Field, 3D Many-sided, Joint Agile, Control Convenience
Objective	Zoom, Muilt-angles Observation
Mirror	45°/55° Observe Module Group
Camera	No CCD
Light Source	LED Light Source, 3D Image In Focus And Electric Motor Control
Stand	Pole Large Stand
Application	It Can Be Used Extensively In Surface Board Of SMT、PCB、BGA Etc
Software	3D Image Measure Software, Precise Quantity Measure Function(Need Computer Stand By)
Features	Big Depth Of Field, High Resolution Ratio(Need Digital Vidicon Stand By)



# A21.3601

## Monocular Zoom Video Microscope, 0.7-4.5x

**OPTO-EDU**



0.7-4.5x Monocular Zoom Video Microscope Body  
 Total Magnification 0.35x-225x Continou Zoom  
 With Standard CCD Mount And Optical Lens 1x  
 Column Diameter 25mm, Working Distance 100mm  
 C-Mount 0.35x, 1.0x, Auxiliary 0.5x, 2.0x Optional

Items	A21.3601 Mono Zoom Video Microscope	A21.3601	A21.3601 -B3	A21.3601 -STL7
Head	Monocular	•	•	•
C-Mount	0.5x, W.D.100mm	•	•	•
Objective	0.7x-4.5x	•	•	•
Magnification	0.35x-2.25x, Zoom Power	•	•	•
Focusing Type	XLB-A1 Basket Holder, Range 62mm, Mirror Aperture $\Phi$ 50mm	•	•	•
Stand	None, Main Body Only	•		
	B3 Pillar Stand, Column diameter $\Phi$ 25mm, Height 323mm or 270mm		•	
	STL7 Stand, Diameter $\Phi$ 25mm, Height 340mm, Size 380x260x20mm			•
Items	A21.3601 Mono Zoom Video Microscope Optional Accessories			
C-Mount	0.35x			
	1.0x			
Auxiliary Objective	0.5x			
	2.0x			
Light Source	LED Ring Lamp			

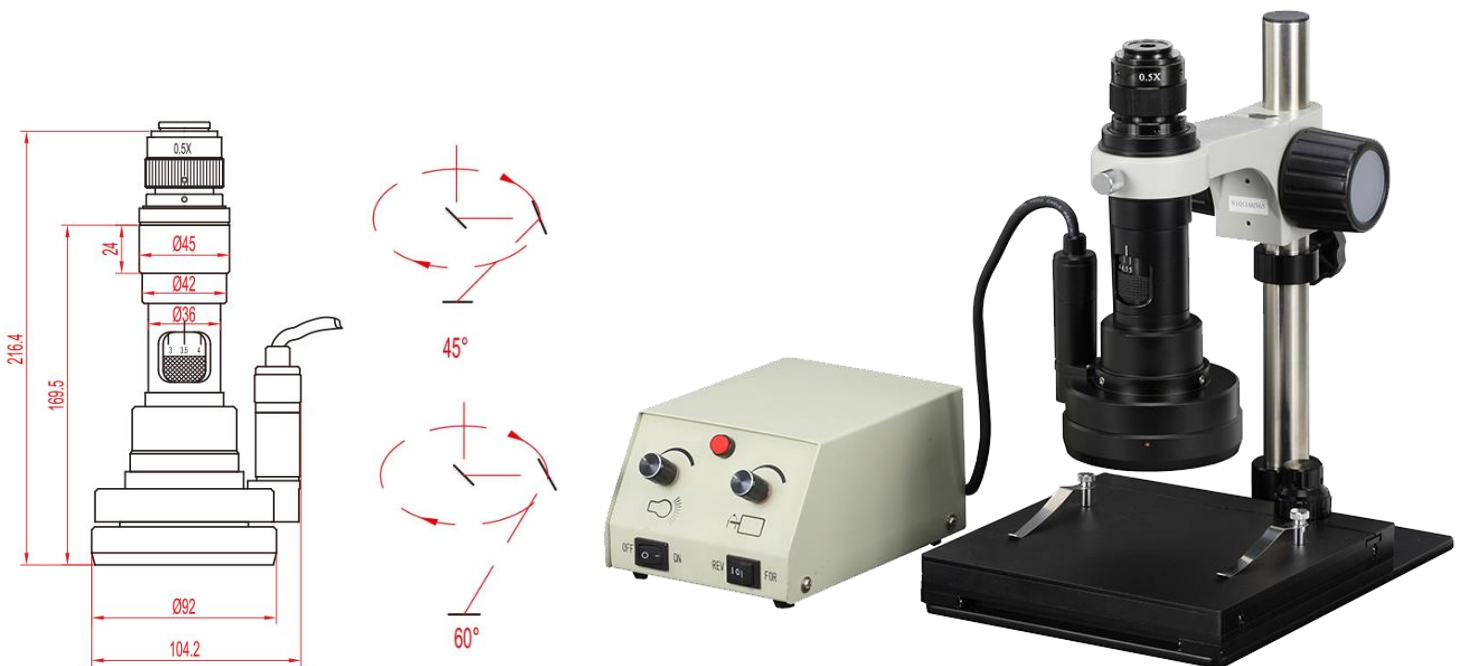
Eyepiece	Standard Objective 0.7x-4.5x		Auxiliary objective 0.5x		Auxiliary objective 2.0x	
	W.D.100mm		W.D.198mm		W.D.46mm	
	Magnification	Field Of View	Magnification	Field Of View	Magnification	Field Of View
0.35x	0.245x	23.0	0.1225x	46.0	0.49x	11.6
	1.575x	3.0	0.7875x	7.0	3.15x	1.7
0.5x	0.35x	17.6	0.175x	35.0	0.7x	8.8
	2.25x	2.7	1.125x	5.0	4.5x	1.3
1.0x	0.7x	9.0	0.35x	17.6	1.4x	4.0
	4.5x	1.6	2.25x	3.0	9x	0.7

# A21.1609

## 3D Motorized Rotate Zoom Mono Video Microscope

**OPTO-EDU**

Advanced Optical System & Precision Machinery Electronics Technology  
3D Whole Azimuth Multi-Angle Observation Greatly Improved Detail Observation Level  
360° Observe Each Side of Object With Large Depth of Field In Real Time Dynamic Image  
Observe The Position Which Cannot Be Viewed By Traditional Lens Like Bottom, Inside,  
Side-Wall Of Holes  
Widely Used For SMT, PCB, BGA Surface Board Assembly Industry



### A21.1609 3D Rotated Zoom Video Microscope

Zoom Range	0.28-1.875x	
Observation Angle	45°	60°
Standard WD	26mm	42mm
Illuminators	Long Life LED Illumination	
Miniature Motor	90V-260V Wide Input Voltage, 5-27turns/minute, Stepless Adjustment	
Holder And Main Body Matching Dimension	45mm	
CCD Adapter	0.5x	
1/3"CCD FOV(mm)	12.9x17.1-1.92x2.56	



# A21.1610

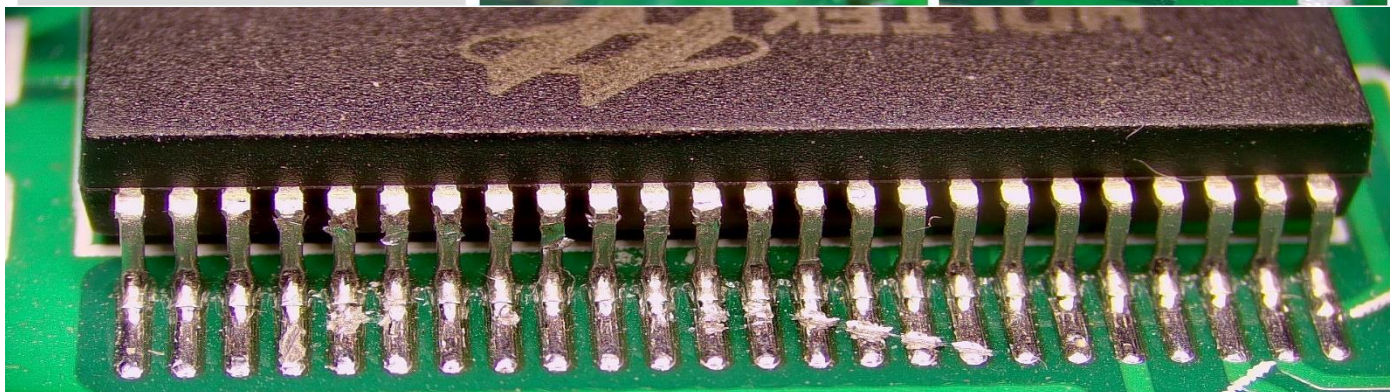
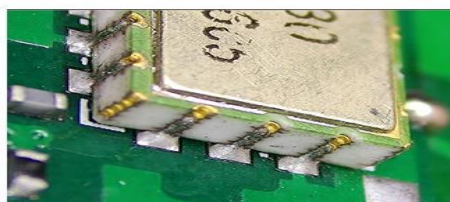
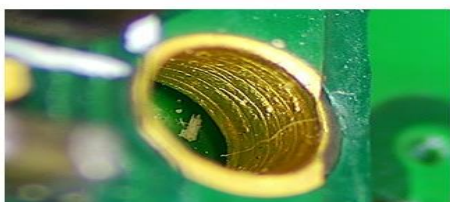
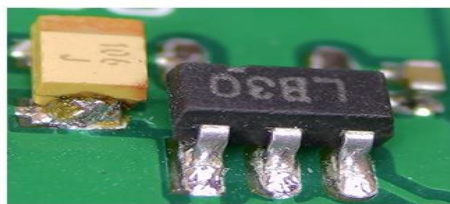
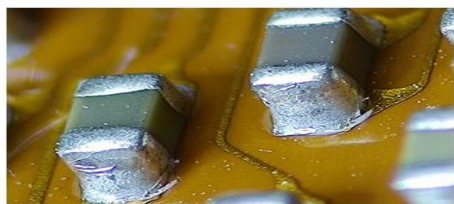
## 2D/3D Manual Rotate Zoom Video Microscope

OPTO-EDU



2D & 3D Rotate Zoom Observation Switch Quickly & Easily By Manual  
3D 360° Observe Each Side of Object With Large Depth of Field In Real Time Dynamic Image  
1080p HDMI Digital Camera Support Photo & Video Capture To U Disk  
12.5" LCD Monitor IPS Screen 16.7M Color Display Resolution 1920x1080p  
Widely Used For SMT, PCB, BGA Surface Board Assembly Industry

### Real Shot Effect





# Specification



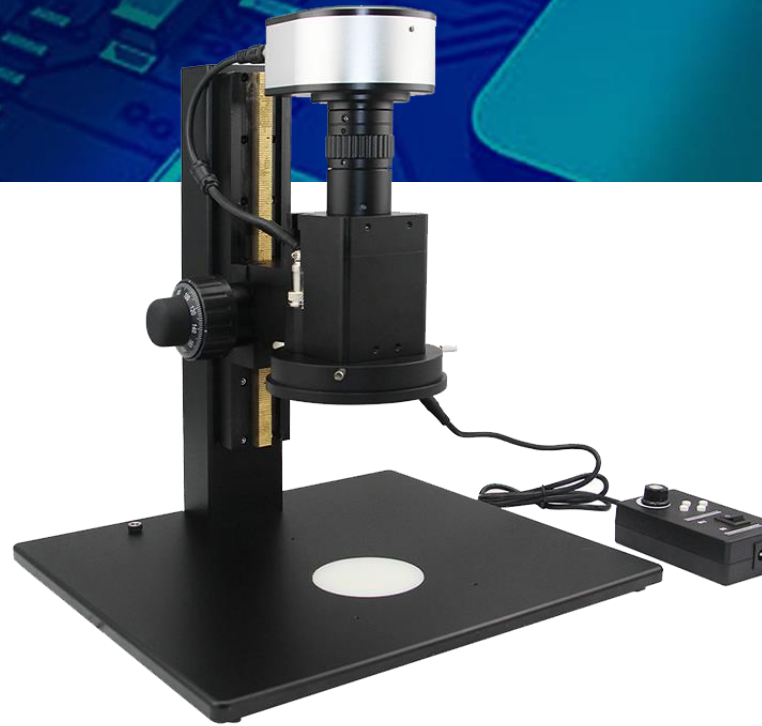
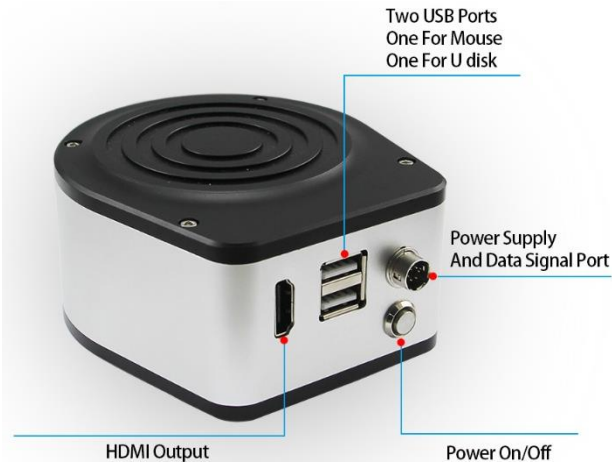
**A21.1610 2D/3D Manual Rotate Zoom Video Microscope**

Lens Parameter	Optical Magnification	0.6-5.0X
	Total Magnification	11-95X Base Of 12.5"Monitor
	Working Distance	86mm
	Ratio	1:8.3
	Field Of View	24*13.5-2.88*1.62mm
	Lens Mount	Standard C mount
2D/3D viewer	Support 2D/3D Observing 360 °Rotation, 45 °Objective Viewing Angle	
Camera Parameter	Image Sensor	1/2" SONY CMOS
	Max Magnification	1920 x 1080
	Pixel Size	3.75µm x 3.75µm
	White Balance	Manual And Auto
	Brightness Control	Manual And Auto
	Memory Function	Take Photo Or Video To U Disk
	Output	HDMI TYPE
Monitor Parameter	Size	12.5"
	Type	IPS
	Resolution	1920*1080
	Color Display	16.7M
	Brightness	300 cd/m <sup>2</sup> (Typ.)
	Contrast	1000:1 (Typ.)
	Power Supply	DC: 12V 2A
	Input	HDMI And VGA
Light Source Parameter	Light Control	4 Zones Control. Brightness Adjust
	Light color	White
	Quantity Of LED	208PCS LED
	Intensity	15000 Lux
	Wavelength	455-457.5nm
	Output Voltage	12V
	Output Power	8-10W
	Working Distance	35-110mm
	Material	Aluminum Alloy
	Diameter	Inner Diameter 40mm, Outer Diameter 106mm, Height 19mm
Stand Parameter	Focus	Coarse Focus
	Base Size	330*300mm
	Height	318mm
Model	Name	Specification
C-Mount	0.5x (Standard)	0.3-2.5X(0.6-5.0X zoom body+0.5X C mount),standard Specification
	0.3x (Optional)	0.18-1.5X(0.6-5.0X zoom body+0.3X C mount)
	1.0x (Optional)	0.6-5X (0.6-5.0X zoom body+1.0X C mount)

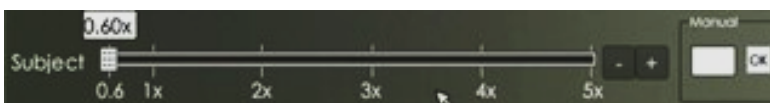
# A21.1620

## Calibration Free Motorized Zoom Video Microscope

**OPTO-EDU**



Motorized 0.6x-5x Zoom Control By Mouse On HDMI Monitor  
No Need To Calibrate In All Zoom Range, Just Measure By Mouse With Pre-Setted Scale!  
Built-in High Precision Electronic Feedback System, Smart Cruise Scanning setting  
Large Size Track Stand With Coaxial Coarse & Fine Focus, With Bottom Light  
Widely Used For SMT, PCB, BGA Surface Board Assembly Industry



**Mouse Control Motorized  
0.6-5.0X Electric Stepless Zoom**

## A21.1620 Calibration Free Motorized Zoom Video Microscope

	Standard	Optional
Optical Magnification	0.3-2.5X (0.6-5.0X Zoom Body With 0.5X CCD Mount)	0.6-5.0X (0.6-5.0X Zoom Body With 1.0X CCD Mount)
FOV	24x13.5-2.88x1.62mm	12x6.75-1.44x0.81mm
Total Magnification	14-120X (Based On 15.6 Inch Monitor)	28-240X (Based On 15.6 Inch Monitor)
Working Distance	86mm	
Resolution	1920*1080	
Frame	60fps	
Sensor	1/2"	
Pixel Size	3.75x3.75μm	
Output	High Resolution HDMI Output	
Light Source	LED Ring Light With 4 Zones Control	
Measuring Function	Support Measuring Of Point, Line, Parallel Lines, Circle, Arc, Angle, Rectangle, Polygon Etc.	
Save Function	Take Photo And Video To U Disk	



Magnification	Working Distance	FOV	Depth Of Field	NA	Resolution
0.6	85.6mm	12x6.75mm	3.12mm	0.021mm	0.016
0.8	85.6mm	9x5.06mm	2.04mm	0.025mm	0.014
1	85.6mm	7.2x4.05mm	1.21mm	0.033mm	0.01
2	85.6mm	3.6x2.03mm	0.38mm	0.053mm	0.006
3	85.6mm	2.4x1.35mm	0.20mm	0.067mm	0.005
4	85.6mm	1.8x1.01mm	0.13mm	0.079mm	0.004
5	85.6mm	1.5x0.81mm	0.09mm	0.090mm	0.004



## Optional Accessories



CCD Mount



Auxiliary Objective



Polarized Coaxial Device



Coaxial Device



11mm LED Point Light

Optional Accessories		
C-Mount	0.3X CCD Mount	Standard C-mount
	0.45X CCD Mount	Standard C-mount
	0.5X CCD Mount	Standard C-mount
	0.67X CCD Mount	Standard C-mount
	0.75X CCD Mount	Standard C-mount
	1X CCD Mount	Standard C-mount
	1.5X CCD Mount	Standard C-mount
	2X CCD Mount	Standard C-mount
	3X CCD Mount	Standard C-mount
Auxiliary Objective	0.3X Auxiliary Objective	Use With 1X Objective, Working Distance 270mm
	0.38X Auxiliary Objective	Use With 1X Objective, Working Distance 205mm
	0.5X Auxiliary Objective	Use With 1X Objective, Working Distance 160mm
	0.6X Auxiliary Objective	Use With 1X Objective, Working Distance 130mm
	0.75X Auxiliary Objective	Use With 1X Objective, Working Distance 105mm
	1.5X Auxiliary Objective	Use With 1X Objective, Working Distance 50mm
	2.0X Auxiliary Objective	Use With 1X Objective, Working Distance 39mm
Other Accessories	Coaxial Device	Use With $\phi$ 11mm LED Point Light
	Polarized Coaxial Device	Use With $\phi$ 11mm LED Point Light
	11mm LED Point Light	3W, Brightness Adjustment

# A22.1504

## Stereo Microscope

**OPTO-EDU**



Binocular Head, 45° Inclined  
 Coarse Focusing Knob, Focusing Range 40mm  
 Frosted Glass Plate, Black/White Plate, Dia.60/90mm  
 Upper/Bottom Light Source, 12V10W Halogen

## Product Specification

A22.1504 Stereo Microscope		A	B	C
Head	Binocular Head, 45° Inclined, Interpupillary Distance 55~75mm	●	●	●
Eyepiece	WF10x, 1 Pair, A51.1523-10	●	●	●
	WF20x, 1 Pair, A51.1523-20	○	○	○
Objective	2x/4x	●	●	●
	1x/3x	○	○	○
Focus	Coarse Focusing Knob, Focusing Range 40mm	●	●	●
W.D.	Working Distance 57mm	●	●	●
Stage	Frosted Glass Plate, Black/White Plate, Dia.60mm	●	●	
	Frosted Glass Plate, Black/White Plate, Dia.90mm			●
Light Source	No Light Source	●		
	Upper Light Source, 12V10W Halogen		●	
	Upper/Bottom Light Source, 12V10W Halogen			●
	Upgrade To LED 1W Light Source		○	○
Size	21x11.0x24cm	●		
	22x11.5x26cm		●	
	22x11.5x26cm			●

Note: ● Means Standard Outfit, ○ Means Optional

# A22.1201

## Stereo Microscope

**OPTO-EDU**



Binocular Head 45° Inclined With Eyepiece WF10x  
 Long Working Distance Objective 1.0x, 0.5x Optional  
 Boom Pole Stand Moving Head To Any Position Freely  
 Incident Light Incandescent 12V10W Or 6V6W Or LED  
 Working Distance 230mm

Items	A22.1201 Stereo Microscope	
Head	The Left Ocular-tube with diopter adjustment 5dp, the Interpupillary Distance:55-75mm	
Eyepiece	WF10X	
Objective	1X	
Working Distance	230mm	
Light Source	Incandescent Lamp 12V/10W 6V/6W	
Optional Accessories		Item No.
Eyepiece	WF5X	A51.1201-05
	WF15X	A51.1201-15
	WF20X	A51.1201-20
Objective	0.5X	A52.1281-05

Technical Data									
Objective	EYEPIECES								Working Distance
	5X		10X		15X		20X		
	Mag.	Field of View	Mag.	Field of View	Mag.	Field of View	Mag.	Field of View	
0.5X	2.5X	40.0mm	5X	40.0mm	7.5X	30.0mm	10X	20.0mm	250mm
1X	5X	20.0mm	10X	20.0mm	15X	15mm	20X	10.0mm	230mm



# A22.1202

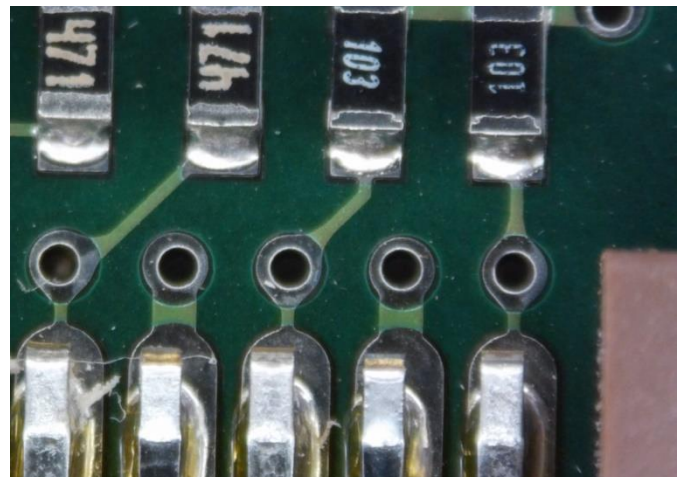
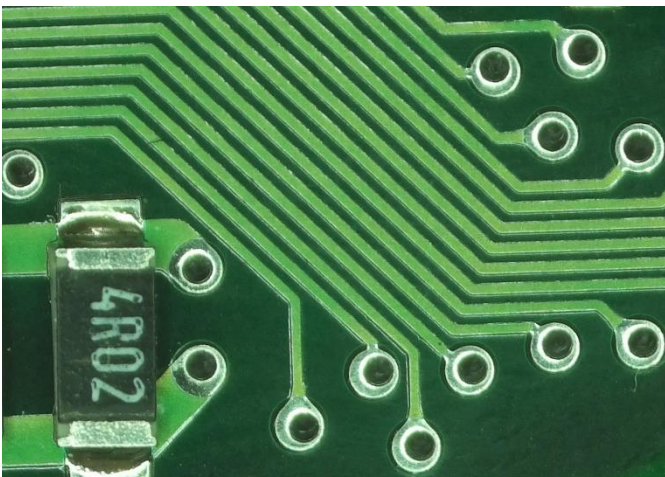
## Stereo Microscope, 2x

**OPTO-EDU**

Upright Binocular Interpupillary Distance 55-75mm  
 Eyepiece WF10x 2 Pcs  
 Objective 2x Working Distance 70mm  
 Small Track Stand With Focusing Knob  
 Built-in Incident Light Incandescent Lamp or LED



Items	A22.1202 Stereo Microscope
Head	Upright Binocular, the Interpupillary Distance:55-75mm
Eyepiece	WF10X
Objective	2X
Working Distance	70mm
Light Source	Built-in Incident Light, Incandescent Lamp or LED



# A22.1218

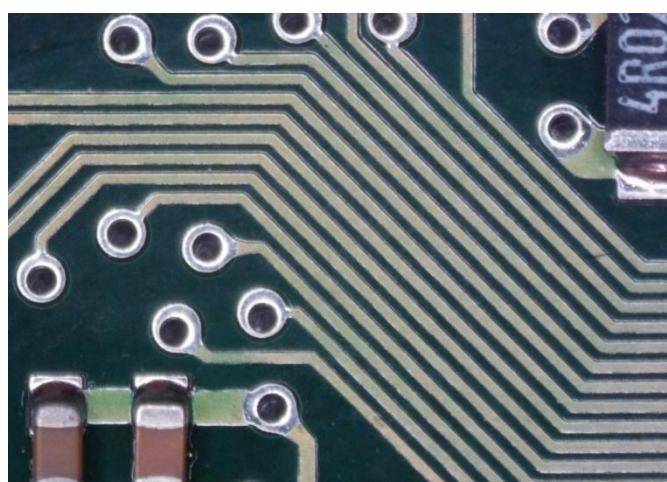
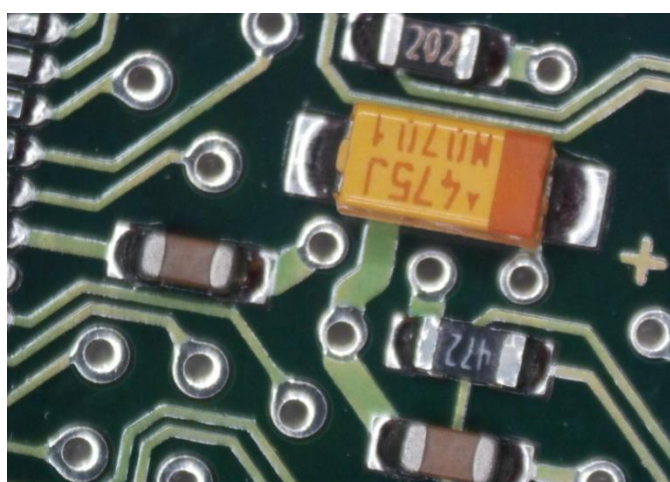
## Stereo Microscope, 2x

**OPTO-EDU**

Upright Binocular Interpupillary Distance 55-75mm  
Eyepiece WF10x 2 Pcs  
Objective 2x Working Distance 70mm  
Small Track Stand With Focusing Knob  
Built-in Incident Light LED



Items	A22.1218 Specification
Head	45° Inclined Binocular Head, The Interpupillary Distance is 55-75mm
Eyepiece	WF10X
Objective	2X
Working Distance	70mm
Light Source	Built-in LED Light





# A22.1237

## Stereo Microscope, 1x2x/1x3x/2x4x

**OPTO-EDU**



Binocular Head 360° Rotatable With Locked-in Eyepiece  
WF10x/22mm High Eye Point Wide Field Eyepiece  
Main Objective 90° Rotatable 1x2x, 1x3x, 2x4x Optional  
Track Stand & Pole Stand Optional With Up/Bottom Light  
Dial & Touch Power On/Off Switch Optional



## Product Specification

Items		A22.1237 Stereo Microscope					
Model	P	PA	PB	TA	TB		
Head	Rotatable 360°, Inclination 45° Binocular, With Locked-in Eyepiece, Left & Right Diopter Adjustable $\pm 5^\circ$ , Head Interpupillary 55-75mm						
Eyepiece	WF10x						
Objective	Three Kind Of Objective 90° Rotatable For Selection: 1x2x, 1x3x, 2x4x						
Light Source	No Light Source	Reflect 1WLED, Transmit 7x20mA					
Stand	Pole Stand	Pole Stand Touch Switch	Pole Stand Dial Switch	Track Stand Touch Switch	Track Stand Dial Switch		
Working Stage	$\Phi 60$ White/Black And $\Phi 60$ Frosted Glass						
Power Supply	No Light Source	AC 100V-240V Wide Range, With 3xAA Rechargeable Batteries 1300mAh					
Optional Accessories							
Eyepiece	WF5x						
	SWF10x						
	WF15x						
	WF20x						



# A22.1239

## Stereo Microscope, 1x2x3x/1x2x4x

**OPTO-EDU**



Binocular Head 360° Rotatable With Locked-in Eyepiece  
1x2x3x/1x2x4x Three Lens Group Switchable  
WF10x/22mm High Eye Point Wide Field Eyepiece  
Track Stand With Up/Bottom Light Brightness Adjustable  
Dial & Touch Power On/Off Switch Optional

Model	A22.1239-TA	A22.1239-TB
Head	Binocular Head, 45° Inclined, Interpupillary Distance 48~75mm	
Eyepiece	WF10x/20mm	
Objective	1x,2x,3x Or 1x,2x,4x (Optional)	
Focusing	Coarse Focusing, Range 40mm	
Working Distance	57mm	
Stand	Track Stand + Touch Switch	Track Stand + Dial Switch
	With Dia 70mm Glass Stage And White/Black Stage	
Light Source	Top 1W LED, Bottom 7x20mA LED Light Brightness Adjustable	
Power	AC 100~240V Wide Range Power, With 3xAA Rechargeable Batteries Built-in Base. (For Order Shipped By Air, The Batteries Will Not Be Included)	

### A22.1239 Technical Data

Objectives	Magnification	View Field	Magnification	View Field	Magnification	View Field	Magnification	View Field
1X	5X	20mm	10X	20mm	15X	15mm	20X	10mm
2X	10X	10mm	20X	10mm	30X	7.5mm	40X	6.5mm
3X	15X	7mm	30X	6.7mm	45X	5.0mm	60X	4.3mm
4X	20X	5mm	40X	5mm	60X	3.5mm	80X	3.2mm

### A22.1239 Optional Accessories

Eyepiece	WF5x/22mm	A51.1221-05
	WF10x/20mm	A51.1221-10
	WF15x/15mm	A51.1221-15
	WF20x/10mm	A51.1221-20

# A22.1309

## Stereo Microscope, 2x4x

**OPTO-EDU**



Binocular Head, Inclined 45°, Interpupillary Distance 55-75mm  
Eyepiece WF10x/18mm 1 Pair  
Objective 2x/4x, Working Distance 100mm  
Track Stand With Frosted Glass Stage Dia.90mm  
Up Coaxial LED, Bottom 1W LED As Standard, Up Oblique LED Optional

## 02 OBJECTIVE

2x/4x, with coaxial LED inside.



### A22.1309 Stereo Microscope

Head	Binocular Head, Inclined 45°, Interpupillary Distance 55-75mm, With A Diopter Adaptor On The Right Eyepiece Tube
Eyepiece	WF10x/18mm
Objective	2x/4x
Working Distance	100mm
Stage	Ø95mm, 1 Pc Frosted Glass Stage(For Bottom Illumination)
Focus	Coarse Focusing, Focusing Range 100mm
Stand	Track Stand, Base Size 25x21x5cm, Height 31cm
Illumination	UpCoaxial LED, Bottom 1W LED (Brightness Adjustable), Up Oblique LED Optional
Power Supply	110~240V Wide Range Power Supply

# A23.1501

## Zoom Stereo Microscope, 0.8~5x

**OPTO-EDU**



A56.1522  
Optional LED Ring Light 60pcs

A56.1522 Use with A23.1501 Microscope

Zoom Stereo 0.8x~5.0x, Total Magnification Up To 4x~200x With Auxiliary Lens & Eyepiece  
 Super Wide Field Plan Eyepiece WF10x/22mm Diopter Adjustable, WF15x, WF20x Optional  
 Auxiliary Lens 0.5x, 0.7x, 2.0x Optional To Enlarge Magnification and Working Distance  
 Large Track Stand With Up/Bottom LED Light In Square & Fan Shape For Choice  
 A56.1522 Extra 60 LEDs Ring Light Source Optional For More Illumination

A23.1501 Zoom Stereo Microscope		B1	T1	B2	T2	B3	T3	B4	T4	
Head	Binocular Head, 45° Inclined, 360° Rotatable, Interpupillary Range 52mm~75mm	o		o		o		o		
	Trinocular Head, 45° Inclined, 360° Rotatable, Interpupillary Range 52mm~75mm, Light Spilt Ratio E30:P70, With 1.0x C-Mount		o		o		o		o	
Magnification	8x~50x, Up To 4x~200x With Optional Eyepieces & Auxiliary Objective									
Eyepiece	WF10x/22mm, Diopter Adjustment -8~+5°									
Zoom Lens	0.8~5.0x									
Zoom Ratio	1:6.5									
Zoom Knob	Zoom Knob With <b>Click Stop</b> At 1x,2x,3x,4x									
Working Distance	115mm, Up To 45~211mm With Auxiliary Objective									
Focusing	Coarse Focusing Knob With Tension Adjustable, Focusing Range 100mm									
Working Stage	Glass Plate Dia.125mm									
Base & Light Source	Big <b>Fan</b> Base Track Stand, No Light	o	o							
	Big <b>Fan</b> Base Track Stand, With Up/Bottom LED			o	o					
	Big <b>Square</b> Base Track Stand, No Light					o	o			
	Big <b>Square</b> Base Track Stand, With Up/Bottom LED							o	o	
A23.1501 Zoom Stereo Microscope Optional Accessories								Item No.		
Eyepiece	WF10x/22mm, Diopter Adjustment -8~+5°								A51.1522-10	
	WF15x/16mm, Diopter Adjustment -8~+5°								A51.1522-15	
	WF20x/12.5mm, Diopter Adjustment -8~+5°								A51.1522-20	
Auxiliary Objective	0.5x/220mm								A52.1522-05	
	0.7x/137mm								A52.1522-07	
	2.0x/45mm								A52.1522-20	
Light Source	LED Ring Light 60 LEDs								A56.1522	



# A23.1502

Zoom Stereo Microscope, 0.7x~4.5x

**OPTO-EDU**



Zoom Stereo 0.7x~4.5x, Total Magnification Up To 3.5x~180x With Auxiliary Lens & Eyepiece  
Trinocular Head, 45° Inclined, 360° Rotatable, ±5 Diopter Adjustable  
Wide Field Plan Eyepiece WF10x/20mm, WF15x, WF20x Optional  
Auxiliary Lens 0.5x, 0.75x, 2.0x Optional To Enlarge Magnification and Working Distance  
Large Pole Stand With Up/Bottom LED Light In Square & Fan Shape For Choice



**A51.1520-10**  
WF10x/20mm



**A51.1520-15**  
WF15x/15mm



**A51.1520-20**  
WF20x/10mm



**A52.1520-05**  
0.5x,W.D.177mm



**A52.1520-75**  
0.75x,W.D. 120mm



**A52.1520-20**  
2.0x,W.D. 30mm

# Product Specification

A23.1502 Zoom Stereo Microscope		B1	T1	B31	T31	B32	T32
Head	Binocular Head, 45° Inclined, 360° Rotatable, ±5 Diopter Adjustable, Interpupillary Adjustment 54-75mm	o		o		o	
	Trinocular Head, 45° Inclined, 360° Rotatable, ±5 Diopter Adjustable, Interpupillary Adjustment 54-75mm, With Eyepiece Adapter + 1.0x C-Mount		o		o		o
Magnification	7x-45x, Up to 3.5x-180x With Optional Eyepieces & Auxiliary Objectives						
Eyepiece	WF10x/20mm, High Eyepoint						
Zoom Lens	0.7~4.5x						
Zoom Ratio	1:6.5						
Working Distance	100mm, Up To 30~177mm With Auxiliary Objectives						
Field of View	1~95.2mm						
Focusing	Coarse Focusing Knob						
Light Source	No Light	o	o				
	Upper/Bottom LED, Brightness Adjustable			o	o	o	o
Stand	ST1 Square Base Pole Stand, Height 248mm, Base 200*255*22mm	o	o				
	BL3 Big Fan Base Pole Stand, With Up/Bottom LED			o	o		
	BL3 Big Square Base Pole Stand, With Up/Bottom LED					o	o
A23.1502 Zoom Stereo Microscope Optional Accessories		Cata. No.					
Eyepiece	WF15x/15mm, High-Eyepoint	A51.1520-15					
	WF20x/10mm, High-Eyepoint	A51.1520-20					
Auxiliary Lens	0.5x,W.D. 177mm	A52.1520-05					
	0.75x,W.D. 120mm	A52.1520-75					
	2.0x,W.D. 30mm	A52.1520-20					
CCD Adapter	Eyepiece Adapter + 0.5x C-Mount	A55.1520-05					

# Product Accessories

A23.1502 Zoom Stereo Microscope Optical Data Sheet								
Objective W,D.	Standard 1.0x 100mm		Auxiliary 0.5x 177mm		Auxiliary 0.75x 120mm		Auxiliary 2.0x 30mm	
	Mag	View Field	Mag	View Field	Mag	View Field	Mag	View Field
10X/20mm	7.0X	28.6mm	3.5X	57.1mm	5.25x	43.8mm	14X	14.3mm
	45.0X	4.4mm	22.5X	8.9mm	45x	6.5mm	90X	2.2mm
15X/15mm	10.5X	21.1mm	5.25X	42.8mm	7.87x	31.8mm	21X	10.7mm
	67.5X	3.3mm	33.75X	6.7mm	50.6x	4.7mm	135X	1.7mm
20X/10mm	14.0X	14.3mm	7.0X	28.6mm	10.5x	23.9mm	28X	7.1mm
	90.0X	2.2mm	45.0X	4.4mm	67.5x	3.6mm	180X	1.1mm

# A23.1503

## Zoom Stereo Microscope, 0.7-4.5x, Mobile Phone Repair

**OPTO-EDU**



0.7~4.5x High Quality Optical System Zoom Stereo Microscope  
 Large Alloy Soft Pad Working Area For Phone Repair Stand 480x320mm,  
 38M HDMI+USB Digital Camera & LCD Screen Camera Optional  
 Upper 56 LEDs Right Light Brightness Adjustable Optional  
 WF15x, WF20x Eyepiece, Auxiliary Lens 0.5x, 2.0x Optional

### A23.1503 DIY Phone PCB Repair Microscope

Head	Trinocular Head, Both Eye Tube Diopter Adjustable Light Split Switch E100:P0/E0:P100 With Eyepiece Adapter + 1.0x C-Mount	
Eyepiece	WF10x/20mm, Both With Eye-cup	
Zoom Lens	0.7~4.5x	
Zoom Ratio	1:6.5	
Magnification	7x-45x, Up To 3.5x-180x With Optional Eyepieces And Auxiliary Lens	
W.D.	Working Distance 100mm, With Standard 1.0x Lens	
F.O.V	Field Of View 1~95.2mm	
Stand	Large Pole Stand, Size 480x320mm, Pole Height 240mm, Dia.32mm, With Heat Resist Soft Rubber Pad, Working Area For Phone PCB Repair	
Optional Accessories		Cata.No.
Eyepiece	WF15x/15mm, High-eyepoint	A51.1520-15
	WF20x/10mm, High-eyepoint	A51.1520-20
Auxiliary Lens	0.5x,W.D. 177mm	A52.1520-05
	0.75x,W.D. 120mm	A52.1520-75
	2.0x,W.D. 30mm	A52.1520-20
Light Source	Upper 56 LEDs Right Light Brightness Adjustable	A56.2103-A
Digital Camera	HDMI+USB+TF Digital Camera, 38.0M, USB Measure	A59.4231
	7" LCD Digital Camera, AV Output	A59.5107
	9" LCD Digital Camera, AV Output	A59.5109
CCD Adapter	Eyepiece Adapter + 0.5x C-Mount	A55.1520-05

### A23.1503 Zoom Stereo Microscope Optical Data Sheet

Objective	Standard 1.0x		Auxiliary 0.5x		Auxiliary 0.75x		Auxiliary 2.0x	
	100mm		177mm		120mm		30mm	
W,D.	100mm		177mm		120mm		30mm	
Eyepiece	Mag	View Field	Mag	View Field	Mag	View Field	Mag	View Field
10X/20mm	7.0X	28.6mm	3.5X	57.1mm	5.25x	43.8mm	14X	14.3mm
	45.0X	4.4mm	22.5X	8.9mm	45x	6.5mm	90X	2.2mm
15X/15mm	10.5X	21.1mm	5.25X	42.8mm	7.87x	31.8mm	21X	10.7mm
	67.5X	3.3mm	33.75X	6.7mm	50.6x	4.7mm	135X	1.7mm
20X/10mm	14.0X	14.3mm	7.0X	28.6mm	10.5x	23.9mm	28X	7.1mm
	90.0X	2.2mm	45.0X	4.4mm	67.5x	3.6mm	180X	1.1mm



# A22.3660

## Step Zoom Stereo Microscope, 2x/4x

**OPTO-EDU**



Optional Accessories		Cata.No.
Eyepiece	WF10x/20mm, High Eyepoint, Dia.30mm	A51.3621-1020
	WF15x/15mm, High Eyepoint, Dia.30mm	A51.3621-1515
	WF20x/10mm, High Eyepoint, Dia.30mm	A51.3621-2010

Step Zoom 2x/4x Objective, Optional 1x/3x, 1x/2x  
 Binocular Head 45° Inclined, 360° Rotatable  
 High-Eyepoint Eyepiece WF10X20mm, WF15x/16mm, WF20x/11mm  
 Magnification 20x/40x, Up To 10x-80x With Optional Eyepieces & Objectives  
 35 Kinds Stand Optional, Details See A54.3630

### A22.3660, A22.3660N Series Zoom Stereo Microscope Specification

Head	Binocular Head, 45° Inclined, 360° Rotatable, Interpupillary Distance 54-76mm, Right Eyepiece Tube Diopter Adjustable +/-5°
Eyepiece	WF10x/20mm Wide Field, High Eyepoint
Objective	Turret Objective 2x/4x, Standard
	Turret Objective 1x/2x Optional
	Turret Objective 1x/3x Optional
Magnification	20x/40x, Up To 10x-80x With Optional Eyepieces & Objectives
Focusing	Pole Stand Coarse Focusing Range 50mm, Tension Adjustable Track Stand Coarse Focusing Range 74mm, Tension Adjustable
Working Distance	100mm
Stand	<b>35 Kinds</b> Stand Optional, Details See <b>A54.3630</b> Choose Model According To Cata. No. Like: <b>A22.3660-B1, A22.3660N-B1</b> Means Binocular Head With B1 Stand

### A22.3660, A22.3660N Optical Data Sheet

Working Distance 100mm									
Objective	Objective 1x		Objective 2x		Objective 3x		Objective 4x		
Eyepiece	Magnification	View Field	Magnification	View Field	Magnification	View Field	Magnification	View Field	
WF10x/20mm	10x	20.0mm	20x	10.0mm	30x	7.5mm	40x	5.0mm	
WF15x/15mm	15x	15.0mm	30x	7.5mm	45x	5.0mm	60x	3.3mm	
WF20x/10mm	20x	10.0mm	40x	5.0mm	60x	3.3mm	80x	2.5mm	

# A22.3660N

## Step Zoom Stereo Microscope, 2x/4x

**OPTO-EDU**



Optional Accessories		Cata.No.
Eyepiece	WF10x/20mm, High Eyepoint, Dia.30mm	A51.3621-1020
	WF15x/15mm, High Eyepoint, Dia.30mm	A51.3621-1515
	WF20x/10mm, High Eyepoint, Dia.30mm	A51.3621-2010

Binocular Head, 45° Inclined, 360° Rotatable  
 Wide Field, High-Eyepoint Eyepiece-WF10X20mm  
 Standard Turret Objective 2x/4x, Optional 1x/3x, 1x/2x  
 Total Magnification 20x/40x, Up To 10x-80x With Optional Eyepieces & Objectives  
 35 Kinds Stand Optional, Details See A54.3630

### A22.3660, A22.3660N Series Zoom Stereo Microscope Specification

Head	Binocular Head, 45° Inclined, 360° Rotatable, Interpupillary Distance 54-76mm, Right Eyepiece Tube Diopter Adjustable +/-5°
Eyepiece	WF10x/20mm Wide Field, High Eyepoint
Objective	Turret Objective 2x/4x, Standard
	Turret Objective 1x/2x Optional
	Turret Objective 1x/3x Optional
Magnification	20x/40x, Up To 10x-80x With Optional Eyepieces & Objectives
Focusing	Pole Stand Coarse Focusing Range 50mm, Tension Adjustable Track Stand Coarse Focusing Range 74mm, Tension Adjustable
Working Distance	100mm
Stand	<b>35 Kinds</b> Stand Optional, Details See <b>A54.3630</b> Choose Model According To Cata. No. Like: <b>A22.3660-B1, A22.3660N-B1</b> Means Binocular Head With B1 Stand

### A22.3660, A22.3660N Optical Data Sheet

Working Distance 100mm									
Objective	Objective 1x		Objective 2x		Objective 3x		Objective 4x		
Eyepiece	Magnification	View Field	Magnification	View Field	Magnification	View Field	Magnification	View Field	
WF10x/20mm	10x	20.0mm	20x	10.0mm	30x	7.5mm	40x	5.0mm	
WF15x/15mm	15x	15.0mm	30x	7.5mm	45x	5.0mm	60x	3.3mm	
WF20x/10mm	20x	10.0mm	40x	5.0mm	60x	3.3mm	80x	2.5mm	

# A22.3670

## Stereo Microscope

**OPTO-EDU**



Binocular Head, 45° Inclined, 360° Rotatable  
 Wide Field, High-Eyepoint Eyepiece-WF10X23mm  
 Standard Turret Objective 2x/4x, Optional 1x/3x, 1x/2x  
 Total Magnification 20x/40x, Up To 10x-120x With Optional Eyepieces & Objectives  
 35 Kinds Stand Optional, Details See A54.3630

### A22.3670 Series Zoom Stereo Microscope Specification

Head	Binocular Head, 45° Inclined, 360° Rotatable, Interpupillary Distance 54-75mm, Both Eyepiece Tube Diopter Adjustable +/-5°
Eyepiece	WF10x/23mm Super Wide Field, High Eyepoint
Objective	Turret Objective 2x/4x, Standard
	Turret Objective 1x/2x Optional
	Turret Objective 1x/3x Optional
Magnification	20x/40x, Up To 10x-120x With Optional Eyepieces & Objectives
Focusing	Pole Stand Coarse Focusing Range 50mm, Tension Adjustable Track Stand Coarse Focusing Range 74mm, Tension Adjustable
Working Distance	110mm
Stand	<b>35 Kinds</b> Stand Optional, Details See <a href="#">A54.3630</a> Choose Model According To Cata. No. Like: <b>A22.3670-B1</b> Means Binocular Head With B1 Stand

### Optional Accessories

		Cata.No.
Eyepiece	WF10x/23mm, High Eyepoint, Dia.30mm	A51.3621-1023
	WF15x/16mm, High Eyepoint, Dia.30mm, Diopter Adjustable	A51.3622-1516
	WF20x/12mm, High Eyepoint, Dia.30mm	A51.3621-2012
	WF25x/9mm, High Eyepoint, Dia.30mm, Diopter Adjustable	A51.3622-2509
	WF30x/8mm, High Eyepoint, Dia.30mm, Diopter Adjustable	A51.3622-3008

### A33.3670 Optical Data Sheet

Working Distance 110mm								
Objective	Objective 1x		Objective 2x		Objective 3x		Objective 4x	
Eyepiece	Magnification	View Field	Magnification	View Field	Magnification	View Field	Magnification	View Field
WF10x/23mm	10x	23.0mm	20x	11.5mm	30x	7.8mm	40x	5.3mm
WF15x/16mm	15x	16.0mm	30x	8.0mm	45x	5.0mm	60x	3.3mm
WF20x/12mm	20	12.0mm	40x	6.0mm	60x	3.3mm	80x	2.5mm
WF25x/9mm	25x	9.0mm	50x	4.5mm	75x	3.0mm	100x	2.3mm
WF30x/9mm	30x	8.0mm	60x	4.0mm	90x	2.7mm	120x	2.0mm



# A23.3645

## Zoom Stereo Microscope, 0.7~4.5x

**OPTO-EDU**



Continuous Zoom 0.7x-4.5x Binocular & Trinocular Head  
7x-45x, Up To 3.5x-270x With Optional Eyepieces & Auxiliary Objectives  
High Eyepoint, Dia.30mm WF10x/20mm, WF15x, WF20x, WF25x Optional  
Working Distance 100mm, Up To 30~165mm With Auxiliary Objectives  
35 Kinds Stand Optional, Details See A54.3630



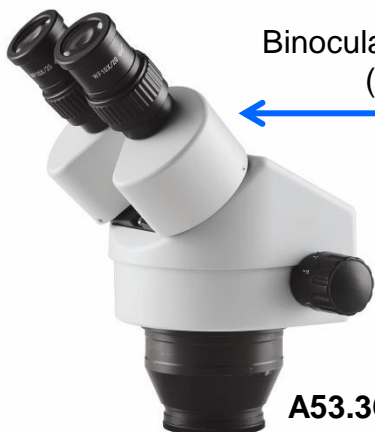
**A56.2103-A**  
LED Ring Light, 56 LEDs



**A56.1211-B**  
LED Ring Light



0.7x-4.5x, Magnification Up To 3.5x-180x With Optional Eyepieces And Auxiliary Objectives



**A53.3645-B**

Binocular Head +WF10x Eyepiece

Binocular And Trinocular  
(Optional)



**A53.3645-T**

Trinocular Head +WF10x Eyepiece

A23.3645, A23.3645N Series Zoom Stereo Microscope Specification		B	T
Head	Binocular Head, 45° Inclined, 360° Rotatable, Interpupillary Adjustment 54-75mm, Both Eyepiece Tube ±5° Diopter Adjustable	•	
	Trinocular Head, 45° Inclined, 360° Rotatable, Interpupillary Adjustment 54-75mm, Both Eyepiece Tube ±5° Diopter Adjustable, With Eyepiece Adapter Focus Adjustable, Light Split Fixed P50:E50, <b>Simul Focal Design</b> To Show Image On Both Eyepiece & Photo Port At Same Time		•
Eyepiece	WF10x/20mm, High Eyepoint, Dia.30mm		
Zoom Lens	0.7x~4.5x		
Zoom Ratio	1:6.5		
Magnification	7x-45x, Up To 3.5x-270x With Optional Eyepieces & Auxiliary Objectives		
Working Distance	100mm, Up To 30~165mm With Auxiliary Objectives		
Field Of View	0.9-57.1mm (Detail See Optical Data Sheet)		
Focusing	Pole Stand Coarse Focusing Range 50mm, Tension Adjustable Track Stand Coarse Focusing Range 74mm, Tension Adjustable		
Stand	35 Kinds Stand Optional, Details See <b>A54.3630</b> Choose Model According To Cata. No. Like: <b>A23.3645-B1</b> Means Binocular Head With B1 Stand <b>A23.3645-B1T</b> Means Trinocular Head With B1 Stand		

A23.3645, A23.3645N Series Zoom Stereo Microscope Optical Data Sheet					
Zoom Lens		0.7x~4.5x			
Auxiliary Lens		0.5x	1.0x (Standard )	1.5x	2.0x
Working Distance		165mm	100mm	45mm	30mm
WF10x/20mm	Magnification	3.5x-22.5x	7.0x-45x	10.5x-67.5x	14x-90x
	View Field(mm)	57.1-8.9	28.6-4.4	19-3	14.3-2.2
WF15x/15mm	Magnification	5.25x-33.75x	10.5x-67.5x	15.75x-101.25x	21x-135x
	View Field(mm)	42.8-6.7	21.1-3.3	14.3-2.2	10.7-1.7
WF20x/10mm	Magnification	7.0x-45x	14.0x-90x	21.0x-135x	28x-180x
	View Field(mm)	28.6-4.4	14.3-2.2	9.5-1.5	7.1-1.1
WF25x/9mm	Magnification	8.85x-56.3x	17.5x-112.5x	26.2x-168.8x	35x-225x
	View Field(mm)	25.4-4.0	12.9-2.0	8.6-1.3	6.4-1.0
WF30x/8mm	Magnification	10.5x-67.5x	21x-135x	31.5x-202.5x	42x-270x
	View Field(mm)	22.9-3.6	11.4-1.8	7.6-1.2	5.7-0.9

Optional Accessories		Cata.No.
Head	Binocular Head + WF10x/20mm	A53.3645-B
	Trinocular Head + WF10x/20mm	A53.3645-T
Eyepiece	WF10x/20mm, High Eyepoint, Dia.30mm	A51.3621-1020
	WF15x/15mm, High Eyepoint, Dia.30mm	A51.3621-1515
	WF20x/10mm, High Eyepoint, Dia.30mm	A51.3621-2010
	WF25x/9mm, High Eyepoint, Dia.30mm	A51.3621-2509
	WF30x/8mm, High Eyepoint, Dia.30mm, Diopter Adjustable	A51.3622-3008
Auxiliary Lens	0.5x, W.D. 165mm	A52.3621-05
	1.5x, W.D. 45mm	A52.3621-15
	2.0x, W.D. 30mm	A52.3621-20
CCD Adapter	Eyepiece Adapter Focus Adjustable	A55.3623-E
	1.0x, Focus Adjustable	A55.3623-10
	0.50x, Focus Adjustable, For 1/2"CCD	A55.3623-05
	0.35x, Focus Adjustable, For 1/3"CCD	A55.3623-35

# A23.3645N

Zoom Stereo Microscope, 0.7~4.5x

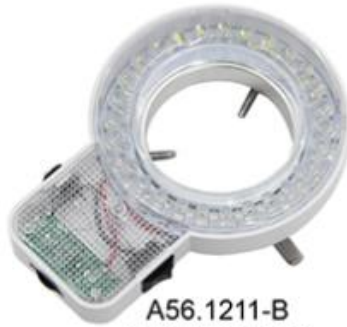
**OPTO-EDU**



Continuance Zoom 0.7x-4.5x Binocular & Trinocular Head  
7x-45x, Up To 3.5x-270x With Optional Eyepieces & Auxiliary Objectives  
High Eyepoint, Dia.30mm WF10x/20mm, WF15x, WF20x, WF25x Optional  
Working Distance 100mm, Up To 30~165mm With Auxiliary Objectives  
35 Kinds Stand Optional, Details See A54.3630



A56.2103-A  
LED Ring Light, 56 LEDs



A56.1211-B  
LED Ring Light



0.7x-4.5x, Magnification Up To 3.5x-180x With Optional  
Eyepieces And Auxiliary Objectives



**A53.3645N-B**  
Binocular Head +WF10x Eyepiece



**A53.3645N-T**  
Trinocular Head +WF10x Eyepiece

Binocular And Trinocular  
(Optional)





A23.3645, A23.3645N Series Zoom Stereo Microscope Specification		B	T
Head	Binocular Head, 45° Inclined, 360° Rotatable, Interpupillary Adjustment 54-75mm, Both Eyepiece Tube ±5° Diopter Adjustable,	•	
	Trinocular Head, 45° Inclined, 360° Rotatable, Interpupillary Adjustment 54-75mm, Both Eyepiece Tube ±5° Diopter Adjustable, With Eyepiece Adapter Focus Adjustable, Light Split Fixed P50:E50, <b>Simul Focal Design</b> To Show Image On Both Eyepiece & Photo Port At Same Time		•
Eyepiece	WF10x/20mm, High Eyepoint, Dia.30mm		
Zoom Lens	0.7x~4.5x		
Zoom Ratio	1:6.5		
Magnification	7x-45x, Up To 3.5x-270x With Optional Eyepieces & Auxiliary Objectives		
Working Distance	100mm, Up To 30~165mm With Auxiliary Objectives		
Field Of View	0.9-57.1mm (Detail See Optical Data Sheet)		
Focusing	Pole Stand Coarse Focusing Range 50mm, Tension Adjustable Track Stand Coarse Focusing Range 74mm, Tension Adjustable		
Stand	35 Kinds Stand Optional, Details See <b>A54.3630</b> Choose Model According To Cata. No. Like: <b>A23.3645-B1</b> Means Binocular Head With B1 Stand <b>A23.3645-B1T</b> Means Trinocular Head With B1 Stand		

A23.3645, A23.3645N Series Zoom Stereo Microscope Optical Data Sheet					
Zoom Lens		0.7x~4.5x			
Auxiliary Lens		0.5x	1.0x (Standard )	1.5x	2.0x
Working Distance		165mm	100mm	45mm	30mm
WF10x/20mm	Magnification	3.5x-22.5x	7.0x-45x	10.5x-67.5x	14x-90x
	View Field(mm)	57.1-8.9	28.6-4.4	19-3	14.3-2.2
WF15x/15mm	Magnification	5.25x-33.75x	10.5x-67.5x	15.75x-101.25x	21x-135x
	View Field(mm)	42.8-6.7	21.1-3.3	14.3-2.2	10.7-1.7
WF20x/10mm	Magnification	7.0x-45x	14.0x-90x	21.0x-135x	28x-180x
	View Field(mm)	28.6-4.4	14.3-2.2	9.5-1.5	7.1-1.1
WF25x/9mm	Magnification	8.85x-56.3x	17.5x-112.5x	26.2x-168.8x	35x-225x
	View Field(mm)	25.4-4.0	12.9-2.0	8.6-1.3	6.4-1.0
WF30x/8mm	Magnification	10.5x-67.5x	21x-135x	31.5x-202.5x	42x-270x
	View Field(mm)	22.9-3.6	11.4-1.8	7.6-1.2	5.7-0.9

Optional Accessories		Cata.No.
Head	Binocular Head + WF10x/20mm	A53.3645-B
	Trinocular Head + WF10x/20mm	A53.3645-T
Eyepiece	WF10x/20mm, High Eyepoint, Dia.30mm	A51.3621-1020
	WF15x/15mm, High Eyepoint, Dia.30mm	A51.3621-1515
	WF20x/10mm, High Eyepoint, Dia.30mm	A51.3621-2010
	WF25x/9mm, High Eyepoint, Dia.30mm	A51.3621-2509
	WF30x/8mm, High Eyepoint, Dia.30mm, Diopter Adjustable	A51.3622-3008
Auxiliary Lens	0.5x, W.D. 165mm	A52.3621-05
	1.5x, W.D. 45mm	A52.3621-15
	2.0x, W.D. 30mm	A52.3621-20
CCD Adapter	Eyepiece Adapter Focus Adjustable	A55.3623-E
	1.0x, Focus Adjustable	A55.3623-10
	0.50x, Focus Adjustable, For 1/2"CCD	A55.3623-05
	0.35x, Focus Adjustable, For 1/3"CCD	A55.3623-35

# A23.3645N-R1

LCD Digital Zoom Stereo Microscope, Mobile Phone Repair

**OPTO-EDU**



38M HDMI+USB Digital Camera & LCD Screen Camera  
0.7~4.5x High Quality Optical System Zoom Stereo Microscope  
Trinocular Head Light Split 5:5 Support View Image In Eyepiece & LCD At Same Time  
Upper 56 LEDs Right Light Brightness Adjustable  
Professional Soft Pad Working Area For MobilePhone Repair On Stand



**A23.3645N-R1**



**A23.3645N-R1H1**



**A23.3645N-R1L1**

# Product Specification

A23.3645N-R1 Series DIY Phone PCB Repair Microscope		A23.3645N-R1	A23.3645N-R1L1	A23.3645N-R1H1
Head	Trinocular Head, With Eyepiece Adapter	•		
	LCD Screen 9" With Digital Camera, AV Output		•	
	HDMI+USB Digital Camera 38.0M Pixels			•
	45° Inclined, 360°Rotatable, Both Tube ±5 Diopter Adjustable, Interpupillary Adjustment 54-75mm			
Eyepiece	WF10x/20mm, Both With Eye-cup			
Zoom Lens	0.7~4.5x			
Zoom Ratio	1:6.5			
Magnification	7x-45x, Up To 3.5x-180x With Optional Eyepieces And Auxiliary Lens			
W.D.	Working Distance 100mm, With Standard 1x Lens			
F.O.V	Field Of View 1~95.2mm			
Stand	Pole Stand, Size 200*255*22mm, Pole Height 240mm, Dia.32mm, With Heat Resist Soft Rubber Pad, Working Area For Phone PCB Repair			
Light Source	Upper 56 LEDs Right Light Brightness Adjustable			
Optional Accessories			Cata.No.	
Eyepiece	WF15x/15mm, High-eyepoint		A51.3621-1515	
	WF20x/10mm, High-eyepoint		A51.3621-2010	
	WF25x/9mm, High-eyepoint		A51.3621-2509	
	WF30x/8mm, High-eyepoint		A51.3621-3008	
Auxiliary Lens	0.5X,W.D. 165mm		A52.3621-0.5x	
	1.5X,W.D. 45mm		A52.3621-1.5x	
	2.0X,W.D. 30mm		A52.3621-2.0x	

A23.3645N Zoom Stereo Microscope Optical Data Sheet								
Objective	Standard 1.0x		Auxiliary 0.5X		Auxiliary 1.5X		Auxiliary 2X	
W,D.	100mm		165mm		45mm		30mm	
Eyepiece	Mag	View Field	Mag	View Field	Mag	View Field	Mag	View Field
10X/20mm	7.0X	28.6mm	3.5X	57.1mm	10.5X	19mm	14X	14.3mm
	45.0X	4.4mm	22.5X	8.9mm	67.5X	3mm	90X	2.2mm
15X/15mm	10.5X	21.1mm	5.25X	42.8mm	15.75X	14.3mm	21X	10.7mm
	67.5X	3.3mm	33.75X	6.7mm	101.25X	2.2mm	135X	1.7mm
20X/10mm	14.0X	14.3mm	7.0X	28.6mm	21.0X	9.5mm	28X	7.1mm
	90.0X	2.2mm	45.0X	4.4mm	135.0X	1.5mm	180X	1.1mm



# A23.3645N-R2

LCD Digital Zoom Stereo Microscope, Mobile Phone Repair

**OPTO-EDU**



38M HDMI+USB Digital Camera & LCD Screen Camera

0.7~4.5x High Quality Optical System Zoom Stereo Microscope

Trinocular Head Light Split 5:5 Support View Image In Eyepiece & LCD At Same Time

Upper 56 LEDs Right Light Brightness Adjustable

Large Alloy Soft Pad Working Area For Phone Repair

## DIY Phone PCB Repair Microscope



# Product Specification

A23.3645N-R2 Series DIY Phone PCB Repair Microscope		A23.3645N-R2	A23.3645N-R2L1	A23.3645N-R2H1
Head	Trinocular Head, With Eyepiece Adapter	•		
	LCD Screen 9" With Digital Camera, AV Output		•	
	HDMI+USB Digital Camera 38.0M Pixels			•
	45° Inclined, 360°Rotatable, Both Tube ±5 Diopter Adjustable, Interpupillary Adjustment 54-75mm			
Eyepiece	WF10x/20mm, Both With Eye-cup			
Zoom Lens	0.7~4.5x			
Zoom Ratio	1:6.5			
Magnification	7x-45x, Up To 3.5x-180x With Optional Eyepieces And Auxiliary Lens			
W.D.	Working Distance 100mm, With Standard 1x Lens			
F.O.V	Field Of View 1~95.2mm			
Stand	Large Pole Stand, Size <b>200*255*8mm</b> , Pole Height 240mm, Dia.32mm, With Heat Resist Soft Rubber Pad, Working Area For Phone PCB Repair			
Light Source	Upper 56 LEDs Right Light Brightness Adjustable			
Optional Accessories			Cata.No.	
Eyepiece	WF15x/15mm, High-eyepoint		A51.3621-1515	
	WF20x/10mm, High-eyepoint		A51.3621-2010	
	WF25x/9mm, High-eyepoint		A51.3621-2509	
	WF30x/8mm, High-eyepoint		A51.3621-3008	
Auxiliary Lens	0.5X, W.D. 165mm		A52.3621-0.5x	
	1.5X, W.D. 45mm		A52.3621-1.5x	
	2.0X, W.D. 30mm		A52.3621-2.0x	

A23.3645N Zoom Stereo Microscope Optical Data Sheet								
Objective	Standard 1.0x		Auxiliary 0.5X		Auxiliary 1.5X		Auxiliary 2X	
W,D.	100mm		165mm		45mm		30mm	
Eyepiece	Mag	View Field	Mag	View Field	Mag	View Field	Mag	View Field
10X/20mm	7.0X	28.6mm	3.5X	57.1mm	10.5X	19mm	14X	14.3mm
	45.0X	4.4mm	22.5X	8.9mm	67.5X	3mm	90X	2.2mm
15X/15mm	10.5X	21.1mm	5.25X	42.8mm	15.75X	14.3mm	21X	10.7mm
	67.5X	3.3mm	33.75X	6.7mm	101.25X	2.2mm	135X	1.7mm
20X/10mm	14.0X	14.3mm	7.0X	28.6mm	21.0X	9.5mm	28X	7.1mm
	90.0X	2.2mm	45.0X	4.4mm	135.0X	1.5mm	180X	1.1mm

# A23.3667

## Zoom Stereo Microscope, 0.67~4.5x

**OPTO-EDU**



Continuance Zoom 0.67x-4.5x Binocular & Trinocular Head  
6.7x-45x, Up To 2x-270x With Optional Eyepieces & Auxiliary Objectives  
High Eyepoint, Dia.30mm WF10x/20mm Diopter Adjustable, WF15x, WF20x, WF25x Optional  
Working Distance 105mm, Up To 26~287mm With Auxiliary Objectives  
35 Kinds Stand Optional, Details See A54.3630



**A56.2103-A**  
LED Ring Light, 56 LEDs



**A56.1211-B**  
LED Ring Light



0.67x-4.5x, Magnification Up To 3.35x-270x With Optional  
Eyepieces And Auxiliary Objectives



**A53.3667-B**  
Binocular Head +WF10x Eyepiece

**A53.3667-T**  
Trinocular Head +WF10x Eyepiece



A23.3667 Series Zoom Stereo Microscope Specification		B	T
Head	Binocular Head, 45° Inclined, 360°Rotatable, Interpupillary Adjustment 54-75mm	•	
	Trinocular Head, 45° Inclined, 360° Rotatable, Interpupillary Adjustment 54-75mm, With Eyepiece Adapter Focus Adjustable, Light Split Fixed P50:E50, <b>Simul Focal Design</b> To Show Image On Both Eyepiece & Photo Port At Same Time		•
Eyepiece	WF10x/22mm, Dia.30mm, High Eyepoint, Diopter Adjustable		
Zoom Range	0.67x~4.5x		
Zoom Ratio	1:6.7		
Magnification	6.7~45x, Up To 2x-270x With Optional Eyepieces & Auxiliary Objectives		
Working Distance	105mm, Up To 26~287mm With Auxiliary Objectives		
Field Of View	0.9-109.5mm (Detail See Optical Data Sheet)		
Focusing	Pole Stand Coarse Focusing Range 50mm, Tension Adjustable Track Stand Coarse Focusing Range 74mm, Tension Adjustable		
Stand	35 Kinds Stand Optional, Details See <a href="#">A54.3630</a> Choose Model According To Cata. No. Like: A23.3667-B1 Means Binocular Head With B1 Stand A23.3667-B1T Means Trinocular Head With B1 Stand		

Optional Accessories		Cata.No.
Head	Binocular Head + WF10x/20mm	A53.3667-B
	Trinocular Head + WF10x/20mm	A53.3667-T
Eyepiece	WF10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	A51.3622-1022
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	A51.3622-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	A51.3622-2012
	WF25x/9mm, High Eyepoint, Diopter Adjustable, Dia.30mm	A51.3622-2509
	WF30x/8mm, High Eyepoint, Diopter Adjustable, Dia.30mm	A51.3622-3008
Auxiliary Lens	0.3x, W.D. 287mm	A52.3622-03
	0.5x, W.D. 177mm	A52.3622-05
	0.7x, W.D. 113mm	A52.3622-07
	0.75x, W.D. 116mm	A52.3622-75
	1.5x, W.D. 47mm	A52.3622-15
	2.0x, W.D. 26mm	A52.3622-20
CCD Adapter	Eyepiece Adapter Focus Adjustable	A55.3623-E
	1.0x, Focus Adjustable	A55.3623-10
	0.50x, Focus Adjustable, For 1/2"CCD	A55.3623-05
	0.35x, Focus Adjustable, For 1/3"CCD	A55.3623-35

A23.3667 Series Zoom Stereo Microscope Optical Data Sheet								
Zoom Lens		0.67x~4.5x						
Auxiliary Lens		0.3x	0.5x	0.7x	0.75x	1.0x(Standard)	1.5x	2.0x
Working Distance		287mm	177mm	120mm	117mm	105mm	47mm	26mm
WF10x/22mm	Magnification	2.0-13.5x	3.4-22.5x	4.7x-31.5x	5.0-33.8x	6.7-45.0x	10.1-67.5x	13.4-90.0x
	View Field(mm)	109.5-16.3	65.7-9.8	46.9-6.9	43.8-6.5	32.8-4.9	21.9-3.3	16.4-2.4
WF15x/16mm	Magnification	3.0-20.3x	5.0-33.8x	7x-47.2x	7.5-50.6x	10.1-67.5x	15.1-101.3x	20.1-135x
	View Field(mm)	79.6-11.9	47.8-7.1	34.1-5.1	31.8-4.7	23.9-3.6	15.9-2.4	11.9-1.8
WF20x/12mm	Magnification	4.0-27.0x	6.7-45.0x	9.3x-63x	10.1-67.5x	13.4-90.0x	20.1-135.0x	26.8-180x
	View Field(mm)	59.7-8.9	35.8-5.3	25.6-3.8	23.9-3.6	17.9-2.7	11.9-1.8	9-1.3
WF25x/9mm	Magnification	5.0-33.8x	8.4-56.3x	11.7x-78.7x	12.6-84.4x	16.8-112.5x	25.1-168.8x	33.5-225x
	View Field(mm)	44.8-6.7	26.9-4.0	19.2-2.8	17.9-2.7	13.4-2.0	9.0-1.3	6.7-1.0
WF30x/8mm	Magnification	6.0-40.5x	10.2-67.5x	14.1x-94.5x	15.0-101.4x	20.1-135x	30.3-202.5x	40.2-270x
	View Field(mm)	37.3-5.6	23.8-3.6	16-2.25	14.1-2.25	11.9-1.8	7.9-1.2	6.0-0.9

# A23.2603, A23.2604, A23.2605 Series

## Zoom Stereo Microscope

**OPTO-EDU**

Greenough optical system, built-in rotating shaft zoom system.  
No tilting Image in left &right light path in complete pupillary distance , No dizziness feeling after long time observing.  
A23.2604&A23.2605 Zoom Knob With Magnifying Stop Pin, User can limit the zoom range as per self-choice.  
Rotating switching to video output and input, 100% light distribution.



A23.2603-B



A23.2604-B & A23.2605-B



A23.2604-T & A23.2605-T



A23.2603-BL

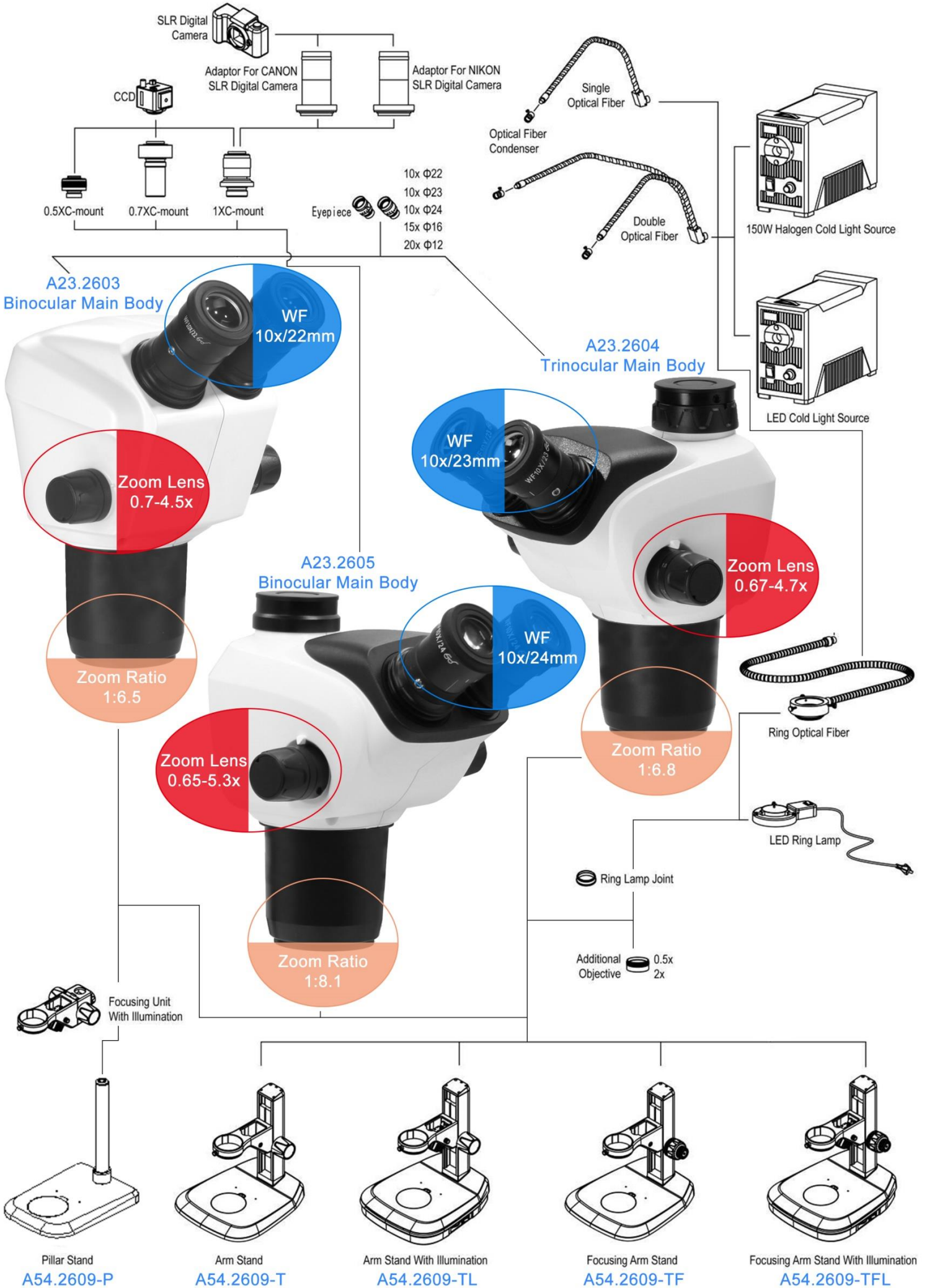


A23.2604-BL & A23.2605-BL



A23.2604-TL & A23.2605-TL

## Zoom Stereo Microscope General Layout Diagram







### A23.2603 Technical Data

Auxiliary Lens		0.5x	0.75x	1x (Standard)	1.5x	2x
Working Distance		184mm	128 mm	108mm		40mm
Eyepieces 10x/22mm	Magnification	3.5 ~ 22.5	5.25 ~ 33.75	7 ~ 45	10.5 ~ 67.5	14 ~ 90
	View Field (mm)	62.86 ~ 9.78	41.91 ~ 6.52	31.43 ~ 4.89	20.95 ~ 3.26	15.72 ~ 2.45
Eyepieces 15x/16mm	Magnification	5.25 ~ 33.75	7.875 ~ 50.63	10.5 ~ 67.5	15.75 ~ 101.25	21 ~ 135
	View Field (mm)	48.57 ~ 7.56	32.38 ~ 5.04	24.29 ~ 3.78	16.19 ~ 2.52	12.14 ~ 1.89
Eyepieces 20x/12mm	Magnification	7 ~ 45	10.5 ~ 67.5	14 ~ 90	21 ~ 135	28 ~ 180
	View Field (mm)	37.14 ~ 5.78	24.76 ~ 3.85	18.57 ~ 2.89	12.38 ~ 1.93	9.29 ~ 1.44

### A23.2604 Technical Data

Auxiliary Lens		0.5x	0.75x	1x (Standard)	1.5x	2x
Working Distance		184mm	128 mm	108mm		40mm
Eyepieces 10x/22mm	Magnification	3.4 ~ 23.5	5.1 ~ 35.3	6.8 ~ 47	10.2 ~ 70.5	13.6 ~ 94
	View Field (mm)	67.65 ~ 9.75	45.1 ~ 6.52	33.82 ~ 4.89	25.55 ~ 3.26	16.91 ~ 2.45
Eyepieces 15x/16mm	Magnification	5.1 ~ 35.3	7.65 ~ 52.9	10.2 ~ 70.5	15.3 ~ 105.8	20.4 ~ 141
	View Field (mm)	50.0 ~ 7.23	33.33 ~ 4.82	25.0 ~ 3.62	16.67 ~ 2.41	12.5 ~ 1.81
Eyepieces 20x/12mm	Magnification	6.8 ~ 47	10.2 ~ 70.5	13.6 ~ 94	20.4 ~ 141	27.2 ~ 188
	View Field (mm)	38.24 ~ 5.53	25.49 ~ 3.69	19.12 ~ 2.77	12.75 ~ 1.84	9.56 ~ 1.38

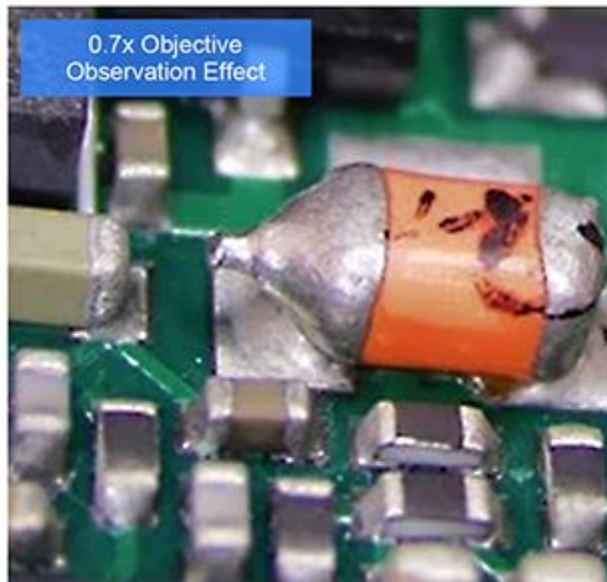
### A23.2605 Technical Data

Auxiliary Lens		0.5x	0.75x	1x (Standard)	1.5x	2x
Working Distance		184mm	128 mm	108mm		40mm
Eyepieces 10x/22mm	Magnification	3.25 ~ 26.5	4.88 ~ 39.75	6.5 ~ 53	9.75 ~ 79.5	13 ~ 106
	View Field (mm)	73.85 ~ 9.06	49.18 ~ 6.04	36.92 ~ 4.53	24.62 ~ 3.02	18.46 ~ 2.27
Eyepieces 15x/16mm	Magnification	4.88 ~ 39.75	7.32 ~ 59.63	9.75 ~ 79.5	14.63 ~ 119.25	19.5 ~ 159
	View Field (mm)	52.25 ~ 6.42	34.84 ~ 4.28	26.15 ~ 3.21	17.43 ~ 2.14	13.08 ~ 1.6
Eyepieces 20x/12mm	Magnification	6.5 ~ 53	9.75 ~ 79.5	13 ~ 106	19.5 ~ 159	26 ~ 212
	View Field (mm)	40 ~ 4.91	26.67 ~ 3.27	20 ~ 2.45	13.33 ~ 1.64	10 ~ 1.23

## Outstanding Ergonomic Design

### Observation Effect

- A23.2604 & A23.2605 35°viewing angle, A23.2603 40°viewing angle, suitable for long-term sitting observation.
- Big stand, high stability , apply to all kinds of anatomy of specimen.



### ■ Stand Style



Pillar Stand



Focusing Arm Stand







# A23.0910

## Zoom Stereo Microscope, Parallel Light, 0.63x~8x,1:12.5

**OPTO-EDU**



Parallel Light Zoom Stereo Microscope 0.63x~8x Zoom Lens, Large Zoom Ratio 1:12.5  
5-45° Tiltatable Trinocular Inclination Adjustable For Easy Use  
PL10x/23mm High Eye-Point Wide Field Plan Eyepiece, Diopter Adjustable  
Upper/Bottom/Oblique/Coaxial Illumination, Polarizer & Analyzer Optional  
Zoom Knob Can Switch Between With/Without Click Stop



### Head & Eyepiece

5~45° Tilting Trinocular Head, Whether Standing Or Sitting, Fully Meet Your Operating Posture  
High Eye-Point Wide Field Plan Eyepiece, Diopter Adjustable, With A Larger Field Of View Than  
Traditional Eyepieces, A Wider And Clearer Image Can Be Obtained

# Product Specification

A23.0910 Zoom Stereo Microscope Zoom Ratio 1:12.5, Parallel Light		A23.0910-B1	A23.0910-B2	A23.0910-B10	Cata. No.
Head	5°~45° Tilting Trinocular Head, Light Splitting Switch E100:P0/E0:P100, Inter-Pupillary Distance 50~76mm, With Eyepiece Lock	●	●	●	
	30° Inclined Trinocular Head, Light Splitting Fixed E50:P50, Inter-Pupillary Distance 50~76mm, With Eyepiece Lock				
Eyepiece	PL10x/22mm High Eye-Point Wide Field Plan Eyepiece, Diopter Adjustable	●	●	●	A51.0925-10
	PL15x/16mm High Eye-Point Wide Field Plan Eyepiece, Diopter Adjustable	○	○	○	A51.0925-15
	PL20x/12.5mm High Eye-Point Wide Field Plan Eyepiece, Diopter Adjustable	○	○	○	A51.0925-20
Lens	Zoom Lens 0.63x~8x, Zoom Ratio 1:12.5, Built-in Aperture Diaphragm Adjustable,	●	●	●	
	Main Scales On Zoom Knob 0.63x, 0.8x, 1.0x, 1.25x, 1.6x, 2.0x, 2.5x, 3.2x, 4x, 5x, 6.3x, 8x, Switch Between With/Without Click Stop				
Auxiliary Objective	0.5x Main Objective APO, Working Distance 70.5mm	○	○	○	A52.0930-05
	1.0x Main Objective APO, Working Distance 78.0mm	●	●	●	A52.0930-10
	1.5x Main Objective APO, Working Distance 31.1mm	○	○	○	A52.0930-15
	2.0x Main Objective APO, Working Distance 20.0mm	○	○	○	A52.0930-20
Nosepiece	Double Nosepiece	○	○	○	
Frame	Coaxial Fine & Coarse Focusing Mechanism, Integrated Focus Holder And Stand, Focusing Range 50mm, Fine Focusing Precision 0.002mm	●	●	●	
Base & Bottom Light Source	(B1)Plan Base Without Illumination, With Black/White Plate Dia.100mm	●	-	-	
	(B2)Plan Base With Bottom Illumination Built-in Mirror 360° Rotatable + Position Adjustable	-	●	-	
	Use With Oblique Illumination 5W LED Forearm Holder (Matching Use With B2 Base)	-	○	-	A54.0965
	(B10)Ultra-thin Base, With Bottom Illumination 5W LED, Color Temperature 3200~5600K & Light Intensity Adjustable With Digital Readout LCD Screen	-	-	●	
	Upper Illumination:	●		●	
	Attachable LED Ring Light (200 Bulbs), Wide Voltage 100-220V				
Light Source	Oblique Illumination: External5W LEDModule,ColorTemperature 5000-5500K White Light,WideVoltage 100-220V, Output 12V5W, Power Supply BoxSize 270×100×130mm, With Single Optical Fiber 500mm (Matching Use With B2 Base)	-	●	-	
	Coaxial Illumination: 1.5x, With 1/4 λ, 360° Rotatable, 20W LED, Intensity Adjustable, With Power Supply Box, With Soft Double Optical Fiber 1000mm	-	-	-	
	Polarizer Fixed On Bottom Light Source (For Transmit Light)	-	○	○	A5P.0925-P
	Analyzer Attached Under Lens, 360° Rotatable (For Transmit Light)	-	○	○	A5P.0925-A
Adapter	0.35xC-mountAdapter,Focus Adjustable	○	○	○	A55.0930-35
	0.5xC-mountAdapter, Focus Adjustable	○	○	○	A55.0930-05
	0.65xC-mountAdapter,Focus Adjustable	○	○	○	A55.0930-65
	1.0xC-mount Adapter, Focus Adjustable	○	○	○	A55.0930-10
Allen key	M4 allen key (3mm)	●	●	●	
Package	Sponge And Carton, One Set/Carton, Carton Size 58.5x55x81cm	●	●	●	

● Means Standard Outfit ○ Means Optional Parts - Mean Not Match

# A23.1001

Zoom Stereo Microscope, Max 0.8~8x

**OPTO-EDU**



**A23.1001 Parallel Zoom Stereo Microscope**  
Binocular Head Inclined 20°  
EWF10x/22mm Eyepiece, Diopter Adjustable

Parallel Optical System, Module Design to Add Function Easily  
Large Zoom Ratio Up to 1:10 With Tilting Head 0°-35° Viewing Angle Adjustable for User  
Transmit & Reflect LED Illumination, Brightness Adjustable, Working Life 6000 Hours  
Complete Accessories Include Polarizing, Dark Field, Fluorescent Attachment  
Plan Apochromatic Objective 0.5x Optional



**A23.1001 Parallel Zoom Stereo Microscope**  
Plan 1x Objective Lens  
Up & Bottom Light Source, Brightness Adjustable



# Product Specification

A23.1001 Zoom Stereo Microscope		A	B	C
Optical System	Parallel Optical System, Module Design to Add Function Easily			
Head	Binocular Head 20° Inclined			
Eyepiece	Extra Wide Field Eyepiece EWF10x/22mm , Diopter Adjustable, Interpupillary 55-75mm			
Zoom Body	0.8~5.0x, Zoom Ratio 1:6	o		
	0.8~6.4x, Zoom Ratio 1:8		o	
	0.8~8.0x, Zoom Ratio 1:10			o
Auxiliary Lens	Plan Achromatic Lens 1.0x			
Working Distance	78mm			
Focusing	Coarse Focusing Konb, Range 105mm	o	o	
	Coaxial Coarse & Fine Focusing Knob, Fine Division 0.015mm, Coarse Stroke 38.4mm/Rotation, Fine Stroke 1.5mm/Rotation, Moving Range 105mm , Focusing Mount Inner Dia. 76mm			o
Illumination	Transmit & Reflect LED Illumination, Brightness Adjustable, Working Life 6000 Hours			
A23.1001 Zoom Stereo Microscope		Cata. No.		
Head	Titling Head 0°-35° Viewing Angle Adjustable for User Change to <a href="#">A23.1005</a>	A53.1014		
Eyepiece	WF15x/16mm	A51.1027-1516		
	WF20x/12mm	A51.1027-2012		
	WF30x	A51.1027-30		
Auxiliary Lens	Plan Apochromatic Lens 0.5x	A52.1023-05A		
	Plan Achromatic Lens 1.0x	A52.1023-10		
	Plan Achromatic Lens 2.0x	A52.1023-20		
	Achromatic Lens 0.3x	A52.1023-03		
	Achromatic Lens 0.5x	A52.1023-05		
Illumination	Coaxial Illumination Set: --Cold Light Power Supplier, --Dual Light Guide, --Coaxial Episcopic Illuminator, --Iris Diaphragm	A56.1021		
	Iris Diaphragm	A56.1021-2		
Working Stage	Temperature Control Stage	A54.1004		
	Movable Working Stage	A54.1007		
Stand <a href="#">Click to See</a>	Universal Table Stand	A54.1011		
		A54.1012		
		A54.1013		
		A54.1014		
		A54.1019		
	Track Stand, Transmit & Reflect Light Source With Coarse & Fine Focusing Optional, Model -F, Like <a href="#">A54.1019-F</a>	A54.1020		
		A54.1021		
Fluorescent	EPI-Fluorescent Attachment For Stereo Microscope Change to <a href="#">A23.1004</a>	A5F.1020		
Dark Field	Dark Field Attachment For Stereo Microscope			
Polarizing	Simple Polarizing Attachment For Stereo Microscope			
LCD Monitor	8.4" TFT Touch Screen LCD Monitor & Connector Change to <a href="#">A36.1001</a>			
Adapter	Photo Tube, Beamsplitter 1 Port	A55.1003-S1		
	Photo Tube, Beamsplitter 2 Port	A55.1003-S2		
	Photo Adapter, 2.0x, For Nikon or Canon Digital SLR Camera	A55.1020-2X		
	C-mount 0.5x	A55.1021-05		
	C-mount 1.0x	A55.1021-10		

# A24.0901-B

## Gem Microscope, 0.67x-4.5x

**OPTO-EDU**



Upper Illumination 1W LED



Upper Illumination 7W Fluorescent



0.67x~4.5x Zoom Lens Total Magnification Up To 2x~225x  
 Professional Jewelry Microscope Stand, With Base Rotating & Inclination Adjustable  
 Built-in Dark Field, Bright Field Both For Jewelry  
 Upper Illumination 7W Fluorescent or 1W LED  
 Transmit Illumination 6V30W Halogen Lamp

### A24.0901 Jewelry Microscope, 0.67x-4.5x Specification

Observation Ways	Bright Field Transmit, Reflect and Dark Field Observation	
Head	Binocular, 45° Inclined, 360° Rotatable, +/-5° Diopter Adjustable, Interpupillary Adjustment 54~75mm	
Zoom Range	0.67~4.5x	
Zoom Ratio	1:6.7	
Eyepiece	WF10x/22mm, Both with Eye-cup	
Magnification	6.7~45x, Up to 2~225x with Auxiliary Lens	
Working Distance	100mm, With Standard 1x Lens. Up to 26~287mm With Auxiliary Lens	
Gem Clamp	Wire Clamp For Bigger Objects, Flat Clamp For Smaller Objects	
Stand	Professional Jewelry Microscope Stand, With Base Rotating and Inclination Adjustable, with Built-in Dark Field	
Illumination	Upper Illumination 7W Fluorescent or 1W LED Transmit Illumination 6V30W Halogen Lam	

### A24.0901 Jewelry Microscope, 0.67x-4.5x Optional Accessories

Eyepiece	WF15x/15mm	A51.0923-15
	WF20x/10mm	A51.0923-20
Auxiliary Lens	0.3x, W.D. 287mm	A52.0928-03
	0.4x, W.D. 217mm	A52.0928-04
	0.75x, W.D. 117mm	A52.0928-75
	1.5x, W.D. 47mm	A52.0928-15
	2.0x, W.D. 26mm	A52.0928-20

# A24.1001

## Gem Microscope

**OPTO-EDU**



0.8x-5.0x Stereo Body Zoom Ratio 1:6.3  
 Total Magnification 12x~75x, With Eyepiece WF15x/16mm  
 Working Distance 115mm, Track Stand Focusing Range 110mm  
 Bright/Dark Field View With Dark Field Stage  
 Track Stand 0-38° Tilltable, Base 0-325° Rotatable

### A24.1001 Gem Microscope

Gemological microscope is designed Gemological microscope is designed for jewelers and gem stone experts, to be one of the most important tool in their jobs. A24.1001 gemological microscope is especially designed to view precious stone samples and the pieces of jewelry that contain them. As a high level professional gemological microscope, A24.1001 is equipped with multiple illumination systems to enhance the image of the samples, will greatly improve the working efficiency.

A24.1001 gemological microscope is usually used to inspect the authenticity of gemstones and in the design, creation, and repair of jewelry. A24.1001 gemological microscope is a precision microscope that are capable of inspecting diamonds, emeralds, rubies, and all other types of precious stones.

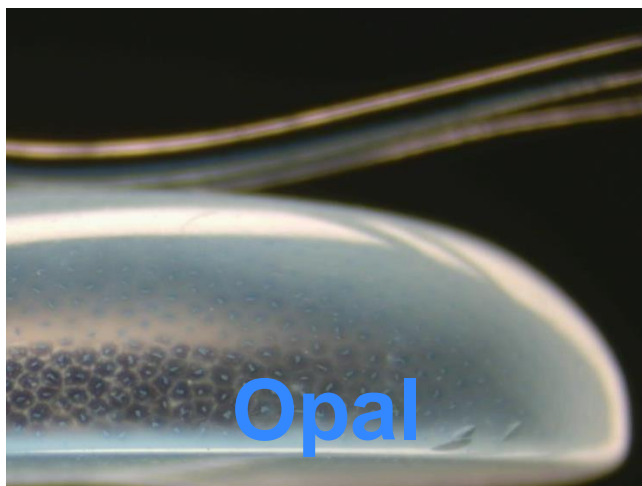
Items	A24.1001 Gem Microscope	B	T
Magnification	12x~75x		
Head	Binocular Viewing Head	•	
	Trinocular Viewing Head		•
Eyepiece	WF15x/16mm, Diopter Adjustable		
Zoom Objective	0.8x-5x		
Zoom Ratio	1:6.3		
Working Distance	115mm		
Focusing	Coarse Focus Knob, Focusing Range 110mm, To Observing Different Sizes Gem And Samples		
Stand	Track Stand 0-38° Tillable, Eye point Height And Incline Angle Adjustable		
Base	0-325° Rotatable		
Illumination	Reflect Light 7W Sunshine Fluorescent Lamp, Meet Requirement For Diamond View		
	Reflect Light LED Point Light		
	Transmit Light 6V/20W Halogen Light, Dark Field Stage With Iris Diaphragm Dia.2mm~41mm Adjustable, To Switch Bright/Dark Field View Easily		
Gem Clamp	High Quality Steel Gem Clamp To Hold Gem Steady & Flexible For All Direction Observation. There Are Two Clamp Holes To Set Gem Clamp As User's Need		



# A24.1201

## Jewellery Gem Microscope, 2x/4x

**OPTO-EDU**



2x/4x Stereo Microscope Body  
 Total Magnification 20x/40x, With Eyepiece WF10x/20mm  
 Incident & Transmit Both 12V/10W Halogen Lamp  
 High Quality Jewellery Tweezer To Hold Gem Steady & Flexible  
 Dark Field Working Stage With Iris Diaphragm To Switch Bright/Dark Field

### A24.1201 Jewelry Microscope

Head	Inclined Binocular Head, 360° Rotatable	
Eyepiece	WF10x/20mm	
Objective	2x/4x Standard, 1x/3x, 1x/2x Optional	
Incident Light	Halogen Lamp 12V/10W, Brightness Adjustable	
Transmit Light	Halogen Lamp 12V/10W, Brightness Adjustable	
Working Distance	90mm	
Working Stage	Jewellery Tweezer	
	Dark Field Working Stage, With Iris Diaphragm	

### Optional Accessories

Eyepiece	WF5x/18mm	E51.1221-05
	WF15x/15mm	E51.1221-15
	WF20x/10mm	E51.1221-20

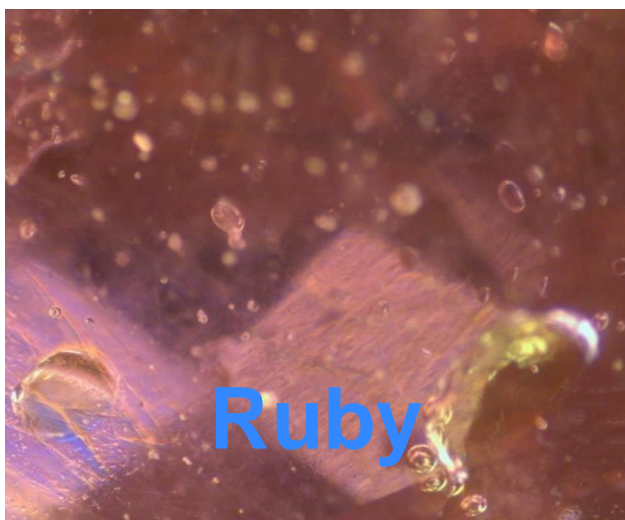
### Optical Data Sheet

Objetive	Working Distance	View Field
1x	75mm	20mm
2x	90mm	10mm
3x	69mm	7.5mm
4x	70mm	5mm

# A24.1202

## Jewery Microscope

**OPTO-EDU**



1x-4x Or 0.7~3.6x Zoom Stereo Microscope  
 Total Magnification 10x-40x Or 7x-36x, With Eyepiece SWF10x/22mm  
 Reflect 12V10W Halogen + 10W Sunshine Fluorescent Light, Transmit 12V10W Halogen  
 High Quality Jewellery Tweezer Tweezer To Hold Gem Steady & Flexible  
 Dark Field Working Stage With Iris Diaphragm To Switch Bright/Dark Field

Items	A24.1202 Jewery Microscope	A	B
Head	Inclined Binocular Head,360° Rotatable		
Eyepiece	SWF10x/22mm		
Objective	1x-4x 0.75x-3.6x	•	•
Working Distance	90mm 86mm	•	•
View Field	22mm-5.5mm 26mm-5.8mm	•	•
Incident Light	Halogen Lamp 12V/10W, With Single Fiber Fluorescent 10W Square		
Transmit Light	Halogen Lamp 12V/10W		
Working Stage	Jewel Tweezer Dark Field Working Stage, With Diaphragm		
<b>A24.1202 Jewery Microscope , Optional Accessories</b>			
Eyepiece	WF5x/18mm		E51.1221-05
	WF10x/20mm		E51.1221-10
	WF15x/15mm		E51.1221-15
	WF20x/10mm		E51.1221-20



# A24.1203

## Jewery Microscope, 0.75~5x

**OPTO-EDU**



0.75~5x Zoom Stereo Microscope Zoom Ratio 1:6.7

Total Magnification 7.5x-50x, With Eyepiece SWF10x/23mm

Reflect 12V10W Halogen + 10W Sunshine Fluorescent Light, Transmit 12V10W Halogen

High Quality Jewellery Tweezer Tweezer To Hold Gem Steady & Flexible

Dark Field Working Stage With Iris Diaphragm To Switch Bright/Dark Field

Items	A24.1203 Jewery Microscope	B	T
Head	Inclined Binocular Head,360° Rotatable	•	
	Inclined Trinocular Head,360° Rotatable		•
Eyepiece	SWF10x/23mm		
Objective	0.75x~5x		
Working Distance	113mm		
View Field	23mm-5.1mm		
Incident Light	Halogen Lamp 12V/10W, With Single Fiber		
	Fluorescent 10W Square		
Transmit Light	Halogen Lamp 12V/10W		
Working Stage	Jewel Tweezer		
	Dark Field Working Stage, With Diaphragm		
A24.1203 Jewery Microscope , Optional Accessories			
Eyepiece	WF5x/18mm	E51.1221-05	
	WF10x/20mm	E51.1221-10	
	WF15x/15mm	E51.1221-15	
	WF20x/10mm	E51.1221-20	



# A31.2601

## Digital Biological Microscope

**OPTO-EDU**



**Back View, Observation Hole Is Convenient For Operation**

Seidentopf binocular head , included 30°, 360° rotatable, interpupillary distance 50-75mm  
 Dustproof, moisture-proof, built-in chip, Built-in 3MP/5MP digital camera system  
 Abbe Condenser N.A. 1.25, with aperture iris diaphragm  
 Double Slides Holder, Easy To View And Compare Two Slides  
 Flexible Knob, Comfortable Feeling, Reliable Operation

Items	A31.2601 Digital Microscope	320	500
Digital Camera System	3.2M pixels, 1/2"CMOS, USB 2.0 5.0M pixels, 1/2"CMOS, USB 2.0	•	•
Head	Seidentopf Binocular Head , Inclinded 30°, 360° Rotatable, Interpupillary Distance 50-75mm		
Eyepiece	WF10x/20mm		
Objective	InfinityEPLAN 4X/x0.10 InfinityEPLAN 10x/0.25 InfinityEPLAN 40x/0.65(S) InfinityEPLAN 100x/1.25(S,O)		
Nosepiece	Quadruple Revolving Nosepiece		
Condenser	Abbe N.A.1.25 With Iris Diagram		
Focusing	Coaxial Coarse And Fine Focusing Knob		
Stage	Mechanical Stage 145x140 mm, With Imported Triangle Track, Moving Range 76x52mm		
Filter	Blue, Built-in		
Light Source	6V20W Halogen Lamp With Brightness Control (85V-265V)		
Software	Digital Image Analysis Software, for Windows2000 / XP / Vista		
Eyepiece	WF10x/18mm WF16x/13mm	A51.2602-10 A51.2602-16	
Objective	InfinityEPLAN 20x/0.65(S)	A52.2605-20	
Dark Field	Dark Field Condenser, Dry N.A.0.9	A5D.2601-S	
Nosepiece	Upgrade to Quintule Nosepiece	A54.2610-4-5	
Light Source	Upgrade to 6V 30W Halogen Lamp Upgrade to 3W LED Illumination ( Non Rechargeable)	A56.2650 A56.2651-3W	
Filter	Green Yellow	A56.2609-SG A56.2609-SA	
Light Source	Upgrade to 6V 30W Halogen Lamp Upgrade to 3W LED Illumination (Non Rechargeable) Upgrade to 0.3W LED (Rechargeable, Including 3 Rechargeable Batteries)	A56.2650 A56.2651-3W A56.2651-03W	
Package	Carton Size 575*380*550mm, 1 Unit/Ctn		
Weight	Gross Weight 8.0kgs, Net Weight 7.0kgs		

# A31.6603

## Digital Biological Microscope

**OPTO-EDU**



Dustproof, moisture-proof, built-in chip.  
 Light distribution 20:80, eyepiece observation synchronized with digital imaging without switching.  
 Built-in 5MP digital camera system, 1/2" CMOS color sequential scanning.  
 USB2.0 connection without external power supply.  
 Available for WINDOWS system.

Items	A31.6603 Digital Microscope	Without holder	With holder
Digital Camera System	5.0M pixels, 1/2" CMOS, USB 2.0	•	
	5.0M pixels, 1/2" CMOS, USB 2.0		•
Head	Seidentopf Binocular Head, Inclined 30°, 360° Rotatable, Interpupillary Distance 48-75mm		
Eyepiece	WF10x/20mm		
Objective	Infinity EPLAN 4x/0.10		
	Infinity EPLAN 10x/0.25		
	Infinity EPLAN 40x/0.65(s)		
	Infinity EPLAN 100x/1.25(s,o)		
Nosepiece	Quadruple Revolving Nosepiece		
Condenser	Abbe N.A.1.25 With Iris Diagram		
Focusing	Coaxial Coarse And Fine Focusing Knob		
Stage	Mechanical Stage 145x140mm, With Imported Triangle Track, Moving Range 76x52mm		
Filter	Blue, Built-in		
Light Source	3W LED With Brightness Control		
Software	Digital Image Analysis Software, for Windows2000 / XP / Vista		
Items	Optional Accessories	Item No.	
Eyepiece	WF10x/18mm	A51.2602-10	
	WF16x/13mm	A51.2602-16	
Objective	Infinity EPLAN 20x/0.65(S)	A52.2605-20	
Dark Field	Dark Field Condenser, Dry N.A.0.9	A5D.2601-S	
Filter	Green	A56.2609-SG	
	Yellow	A56.2609-SA	
Light Source	Upgrade to 6V 30W Halogen Lamp	A56.2650	
	Upgrade to 3W LED Illumination (Non Rechargeable)	A56.2651-3W	
	Upgrade to 3W LED (Rechargeable, Including 3 Rechargeable Batteries)	A56.2651-3WR	

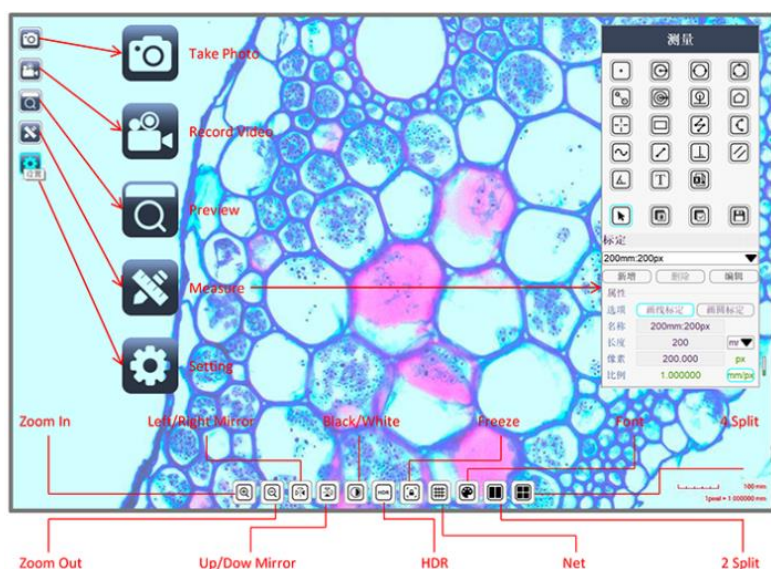
Note: "•" In Table Is Standard outfits, "○" Is Optional Accessories.

**NEW**

# A33.1009

9" LCD Digital Biological Microscope,  
5.0M HDMI+USB

**OPTO-EDU**



9" HD LCD Screen With Measure, Photo, Video Function  
 5.0M HDMI Mouse Control **Measuring Function** + USB2.0 Digital Camera With TF Card  
 Black Sedentopf Trinocular Head Light Split Switch E100:P0/E0:P100  
 Large Size Double Layer Mechincal Stage 140x140mm Moving 50x75mm  
 Classical 107BN Model High Quality Optical System Microscope

## Product Specification

### A33.1009 Biological Microscope Specification

Magnification	40x~1600x
Head	Sliding Trinocular Black Head, 45° Inclined, 360° Rotatable, With Eyepiece Adapter & 1.0x C-Mount
Eyepiece	Wide Field WF10x/18mm Wide Field WF16x/11mm
Nosepiece	Quadruple Nosepiece
Objective	Achromatic 4x/0.10, 10x/0.25, 40xs/0.65, 100xs/1.25(Oil)
Stage	Double Layer Mechanical Stage, 140*140mm, Mvoing Range 50*75mm
Focusing	Low Position Coaxial Coarse & Fine Focusing. Fine Focusing Scale 0.002mm, With Tension Adjustment, With Up Limit
Condenser	N.A.1.25 Abbe Condenser, Iris Diaphargm, With Filter Holder
Filter	Blue, Yellow, Green
Light Source	Plan-Concave Mirror Built-in Illumination 6V20W Halogen Lamp



A33.1009 LCD Digital Camera Specification		
Sensor	1/2.8"Sony Star Light Level CMOS Sensor	
Resolution	5.0M CMOS	
LCD Screen	9"LCD, Resolution 1024x600 High Clearance Screen	
Output	USB 2.0 Type-A, TF Card	
Pixel Size	2.0x2.0um	
Power Supply	DC 12V/2A Power Adapter, Input 100-240V AC	
Function	Photo, Video, Meaure, Compare	
	SupportUSB Mouse Control To Capture Photo, Video, Measure, Setting	
	USB 2.0 To Win 7, Win10 System, Software S-Eye Included	
	Brightness, Contrast, Exposure, White Balance Adjustable	
	10x Digital Zoom, 4 Split/ 2 Split Windows Image Compae	
	Storage To TF Card	
	Cross Line With Scale, Calibrated	
Size / Weight	Net Line 8 Kinds, Width & Color Adjustable	
	Product Size 225x52x175mm, Net Weight 0.7Kg	
Standard Package	LCD Camera, USB 2.0 Cable, Mouse, DC12V Power Adapter	
USB Mouse Control Operation Manual	1. Insert the mouse into the camera Type-A USB 2.0 port, connect 12V power supply to camera.	
	2. Turn on the power switch, when the camera is running, the LED light turns blue	
	3. Move the mouse to the top left corner of the screen to call up the MAIN MENU, including icon : Take Photo, Record Video, Preview, Measure, Setting.	
	4. Move the mouse to the middle position at the bottom of the screen to call up the QUICK MENU, including icon: Zoom In, Zoom Out, Up/Dow Mirror, Left/Right Mirror, Black/White, HDR, Freeze, Net, Font, 2 Split, 4 Split	
	5. Click the MEASURE icon to pop up the measure window, which support over 20 kinds of measurement graphics.	
	6. Click the EDIT button and fill in the name to of new ruler to CALIBRATE.Move the mouse to the corresponding standard scale in the image display window and draw a standard length scale line. Then fill in the length column and click SAVE to complete the calibration setting. If you want to add more ruler, just repeat above steps.	
	7.Click mm/PX to open or close the screen scale.	
	8. If the USB port is directly connected to the computer, the screen and the computer can be displayed synchronously (the USB cable must be connected to the computer before the device is powered on)	
A33.1009 LCD Digital Biological Microscope Optional Accessories		Cata. No.
Adapter	0.45x C-mount With Reduction	A55.1002-45
Dark Field	Dark Field Condenser, N.A. 0.7~0.9, Dry	A5D.1006-D
	Dark Field Condenser, N.A. 1.25~1.35, Immersion	A5D.1006-I
Objective	Achromatic 100X with Cone Diaphragm for Oil Dark Field Observation	A5D.1030-1
	Plan 100X with Iris Diaphragm for Oil Dark Field Observation	A5D.1030-2
Polarizing	Simple Polarizing Kit	A5P.1001
Phase Contrast	Sliding Phase Contrast Set	A5C.1002-C3
	--Sliding Phase Contrast Condenser	
	--Achromatic Phase Contrast Objective 10x,40x	
	--Centering Telescope	
Fluorescent	--Green Filter	A5F.1001
	EPI-Fluorescent Kit	
	--Power Supplier 220V/110V Interchangeable, Digital Display	
	--100WHBO Ultra Hi-Voltage Spherical Mercury Lamp	
	--Barrier To Resist Ultraviolet Light	
	--Fluorescence Free Oil	
--Fluorescent Objective 10x,25x,40x,100x	A5F.1001-UV	
--Excitation Filter B/G		
	--Excitation Filter U/V	

# A33.1019

9.7" LCD Digital Biological Microscope,  
5.0M Android Pad

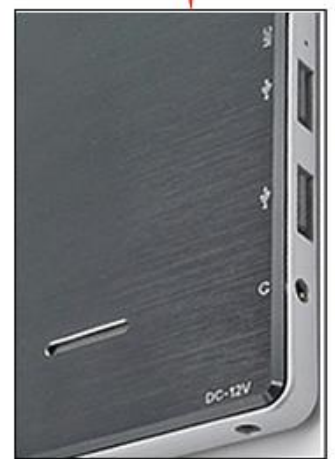
**OPTO-EDU**



9.7" HD LCD Touch Screen Android Pad With Measuring Software  
5.0M Digital Camera With TF Card, HDMI + USB Output  
Classical 107BN Laboratory Biological Microscope  
High Quality Optical System With Achromatic Objectives



**HDMI and TF-CARD  
Interface**



**Mini USB2.0 & USB 2.0  
Interface, IT Has Mike  
and Headphone Function**

# Product Specification

A33.1019 LCD Digital Biological Microscope		
Magnification	40x~1600x	
Head	Sliding Trinocular Black Head, 45° Inclined, 360° Rotatable, With Eyepiece Adapter & 1.0x C-Mount	
Eyepiece	Wide Field WF10x/18mm	
	Wide Field WF16x/11mm	
Nosepiece	Quadruple Nosepiece	
Objective	Achromatic 4x/0.10, 10x/0.25, 40xs/0.65, 100xs/1.25(Oil)	
Stage	Double Layer Mechanical Stage, 140*140mm, Mvoing Range 50*75mm	
Focusing	Low Position Coaxial Coarse & Fine Focusing. Fine Focusing Scale 0.002mm, With Tension Adjustment, With Up Limit	
Condenser	N.A.1.25 Abbe Condenser, Iris Diaphargm, With Filter Holder	
Filter	Blue, Yellow, Green	
Light Source	Plan-Concave Mirror	
	Built-in Illumination 6V20W Halogen Lamp	
Screen Size	9.7"HD IPS Touch Screen With Backlight	
Camera	5.0M 1/2.5"CMOS Digital Camera	
Pixel Size	2.2umx2.2um	
Resolution	2048x1536 @15FPS	
Data Storage	TF Card or Built-in Memory	
Data Output	USB2.0, HDMI, TF Card	
Photo	5.0M .JPEG	
Video	1080p Video Record	
Cross Hair	Support	
System	Android 5.1 System	
	90 Languages	
	Support Mouse + Keyboard Control	
	Support WIFI	
Function	Support Bluetooth	
	S-Eye Software & Instruction Manual Installed	
	Mark: Point, Crosshair, Coordinate, Text	
	Length Measure: Straight Line Length, Broken Line Length, Curve Length, Parallel Line Distance, Point To Line Distance	
	Distance Between 2 Circle Centers: Radius Fixed Circle, Two-point Fixed Circle, Three-point Fixed Circle	
Power	Geometric Measure: Line Segment Length, Radius Fixed Circle, Two-point Fixed Circle, Three-point Fixed Circle, Concentric Circle	
	Geometric Area Measure: Polygon, Square	
	DC 12V/2A Power Adaptor, AC 100~240V	
Size	Pad 238x182x12mm, Camera 40x39mm	
Package	Packing Box 10x24x29cm, 0.6Kg, 1 pc/Box	
A33.1019 LCD Digital Biological Microscope Optional Accessories		Cata. No.
Adapter	0.45x C-mount With Reduction	A55.1002-45
Dark Field	Dark Field Condenser, N.A. 0.7~0.9, Dry	A5D.1006-D
	Dark Field Condenser, N.A. 1.25~1.35, Immersion	A5D.1006-I
Objective	Achromatic 100X with Cone Diaphram for Oil Dark Field Observation	A5D.1030-1
	Plan 100X with Iris Diaphram for Oil Dark Field Observation	A5D.1030-2
Polarizing	Simple Polarizing Kit	A5P.1001
Phase Contrast	Sliding Phase Contrast Set	A5C.1002-C3
	--Sliding Phase Contrast Condenser	
	--Achromatic Phase Contrast Objective 10x,40x	
	--Centering Telescope	
Fluorescent	--Green Filter	A5F.1001 A5F.1001-UV
	EPI-Fluorescent Kit	
	--Power Supplier 220V/110V Interchangeable, Digital Display	
	--100WHBO Ultra Hi-Voltage Spherical Mercury Lamp	
	--Barrier To Resist Ultraviolet Light	
	--Fluorescence Free Oil	
	--Fluorescent Objective 10x,25x,40x,100x	
--Excitation Filter B/G		
--Excitation Filter U/V		



**HOT**

# A33.1502

## 9.7" LCD Digital Microscope, 5.0M, Android Pad

**OPTO-EDU**



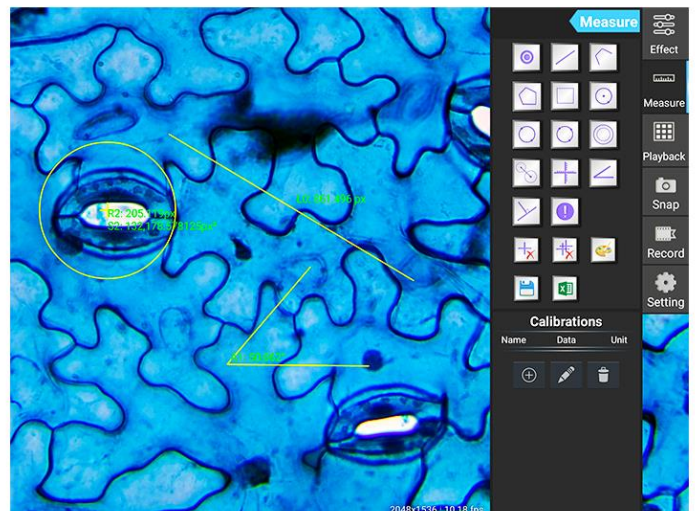
**USB / HDMI / TF Card**



9.7" LCD Touch Screen Pad, With Android System + Measuring Software  
High Eyepoint Wide Field Eyepiece WF10x/20mm Dia.30mm  
Achromatic HC 4x,10x,40x100x Objective, Upgradeable To Infinity  
Double Layer Mechanical Stage 143\*132mm, Upgradeable To 216x150mm  
3W LED Kohler Illumination With Removable Light House For Easy Maintenance

### 9.7" Android Pad + 5.0M Camera

Sharp Image | All-in-One | Photo & Video



# Product Specification

A33.1502 9.7" LCD Digital Biological MicroscopeA	
Head	Trinocular Head, 30° Inclined, Interpupillary Distance 48-75mm, Both Eyepiece Tube Diopter Adjustable
Eyepiece	WF10x/20mm, Diopter Adjustable, Dia. 30mm
Objective	High Contrast Chromatic Free 4x, 10x, 40x(S), 100x(Oil, S)
Focus Knob	Coaxial Coarse & Fine Focusing, Fine Division 0.002mm, Coarse Stroke 37.7mm/Rotation, Focusing Range 24mm
Nosepiece	Quadruple, Backward With Click Stops
Stage	Double Layer Mechanical Stage 142x132mm, Graphite Surface, Moving Range 75x50mm
Condenser	Abbe Condenser N.A.1.25, Center Adjustable
Light Source	3W LED Brightness Adjustable
Adapter	C-Mount 1.0x
Package	53*32.5*53.5cm/11.5Kg, 1 Set/Carton
9.7" LCD Pad Digital Camera (A59.3520)	
LCD	9.7" HD IPS Touch Screen With Backlight
Camera	5.0M 1/2.5" CMOS Digital Camera
Resolution	2048x1536 @15FPS
Pixel	2.2umx2.2um
Data Storage	TF Card or Built-in Memory
Data Output	USB2.0, HDMI, TF Card
Photo	5.0M .JPEG
Video	1080p Video Record
System	Android 5.1 System
	90 Languages
	Support Mouse + Keyboard Control
	Support WIFI
Function	Support Bluetooth
	<b>S-Eye</b> Software & Instruction Manual Installed
	<b>Mark:</b> Point, Crosshair, Coordinate, Text
	<b>Length Measure:</b> Straight Line Length, Broken Line Length, Curve Length, Parallel Line Distance, Point To Line Distance
	<b>Distance Between 2 Circle Centers:</b> Radius Fixed Circle, Two-point Fixed Circle, Three-point Fixed Circle
<b>Geometric Measure:</b> Line Segment Length, Radius Fixed Circle, Two-point Fixed Circle, Three-point Fixed Circle, Concentric Circle	
<b>Geometric Area Measure:</b> Polygon, Square	
Power	DC 12V/2A Power Adaptor, AC 100~240V
Size	Pad 238x182x12mm, Camera 40x39mm

# A31.0909

## Digital Biological Microscope, 3.0M

**OPTO-EDU**



**Achromatic Objectives:**

3.0M CMOS Digital Camera, USB 2.0 Output  
Binocular Head, 30° Inclined, Diopter Adjustable +/-5°  
Eyepiece WF10x/18mm, Objective Achromatic 4x,10x,40x(S),100x(O,S)  
Double Layer Mechanical Stage, Size 132\*140mm, Moving Range 50\*76mm  
3W LED High Brightness, Wide Voltage AC100~240V

A31.0909 Biological Microscope		A31.0909	A31.0909-P
Head	3.0M CMOS Digital Camera, USB 2.0 Output	o	o
	Binocular Head, 30° Inclined, Diopter Adjustable +/-5°, Interpupillary Distance 50~75mm	o	o
Eyepiece	WF10x/18mm	o	o
Nosepiece	Backward, Quaduple Nosepiece	o	o
Objective	Achromatic 4x,10x,40x(S),100x(O,S)	o	
	Plan 4x,10x,40x(S),100x(O,S)		o
Working Stage	Double Layer Mechanical Stage, Size 132*140mm, Moving Range 50*76mm, Precision 0.1mm	o	o
Condenser	Abbe N.A.1.25, With Iris Diaphragm, Fixed But Center adjustable	o	o
Focusing	Low Position Designed, Coaxial Coarse & Fine Focusing, Coarse Focusing Range 25mm, Fine Focusing Scale 0.002mm, With Tension Adjustment, With Upper Safty Stop	o	o
Light Source	3W LED High Brightness	o	o
Power	Wide Voltage AC100~240V Input, DC 6V1A Output	o	o



# A31.0911

## Digital Biological Microscope, 4.0M, HDMI+USB

**OPTO-EDU**



### Engineering Structure With Practicality And Aesthetic

The double - layer mechanical stage of A12.0911 adopts line rail for overload protection at the end of x axis, and avoids

Digital Binocular Head, Built-in 4.0M 1/3" CMOS Camera, Output HDMI++MiniUSB+SD Card  
Infinity Plan Achromatic Objective 4x.10x.20.40x.100x On 5 Holes Nosepiece  
N.A.1.25 Kohler Illumination Condenser, With Iris Diagram, Center Adjustable  
LCD Screen On Stand Showing Color Temperature & Brightness Memory Function  
Dark Field, Polarizing, Phase Contrast Fluorescent Funcion Upgradable

### A31.0911 Digital Biological Microscope

Optical System	Infinity Chromatic Aberration Correction System
Head	Digital Binocular Head, Built-in 4.0M 1/3" CMOS Camera, Output HDMI+MiniUSB+SD Card, Built-in 16G Memeory, Interpupillary Distance 50-75mm, $\pm 5$ Diopter Adjustable, Light Split 8:2
Eyepiece	WF10x/20mm Wide Field Eyepiece
Nosepiece	5 Holes Nosepiece
Objective	Infinity Plan Achromatic 4x10x20x40x100x
Working Stage	Double Layer Mechanical Stage 150mm $\times$ 162mm
Condenser	N.A.1.25
Light Source	3W LED, With LCD Screen, Adjustable Color Temperature (3000K-5600K), Brightness Memory Function
Power	Wide Range 100V -240V

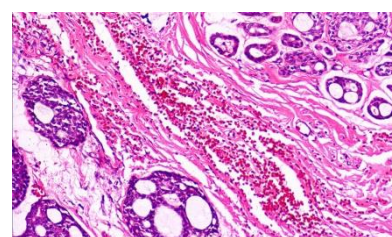
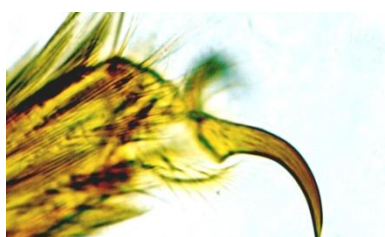
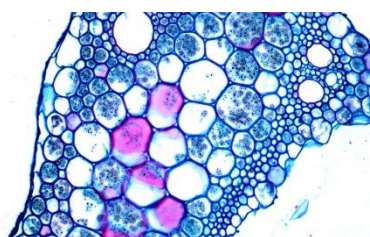
# A31.0921

## WIFI Digital Biological Microscope, 2.0M, Android

**OPTO-EDU**



Monocular Head Built-in WIFI Camera 2.0MP  
App Software For Android  
Achromatic 4x/0.10, 10x/0.25, 40xs/0.65  
N.A.0.65 Condenser With Iris Diaphragm  
LED Illumination 3 Bulbs Brightness Adjustable



### A31.0921-2M

Magnification	40x~400x
Head	Monocular Head, 30° Inclined Built-in WIFI camera, 2MP. With Pad holder
Eyepiece	PL10X/18mm
Nosepiece	Triple Nosepiece
Objective	Achromatic 4x/0.10, 10x/0.25, 40xs/0.65
Stage	Metal Plain Stage 110*120mm, With Slide Clip
Focusing	Separate Coarse & Fine Focusing. Coarse Focusing Range 8.7mm, Fine Focusing Range 1.2mm
Condenser	NA0.65 condenser and iris diaphragm
Light Source	LED Illumination (3 bulbs)

# A31.0923

## WIFI Digital Biological Microscope, 2.0M, Android

**OPTO-EDU**



**A31.0923-B2M**



**A31.0923-M2M**

Binocular Head Built-in WIFI Camera 2.0MP

App Software For Android

Double Layers Mechanical Stage 115x125mm N.A.1.25 Abbe Condenser

Coaxial Coarse & Fine Focus, With Coarse Adjustment Stop Screw And Tightness Adjustment,  
Focusing Range 13mm With Clip Stage

0.2W LED 5700-6500K Intensity Adjustable

A31.0923		M2M	B2M
Head	Monocular Head 30° Inclined, Built-in WIFI Camera, 2MP. With Pad Holder	●	
	Binocular Head 30° Inclined, 360° Rotatable, Inter-pupillary Distance 50~75mm, Built-in WIFI Camera, 2MP. With Pad Holder		●
Eyepiece	Plan Eyepiece 10x/18mm With Eye Guard	●	●
Nosepiece	Built-in Quadruple Nosepiece	●	●
Objective	Achromatic Objectives 4x/0.10(Black)	●	●
	Achromatic Objectives 10x/0.25(Black)	●	●
	Achromatic Objectives 40xS/0.65(Black)	●	●
	Achromatic Objectives 100xS/1.25(Oil)(Black)	●	●
Stage	115x125mm Double Layers Mechanical Stage, With N.A.1.25 Abbe Condenser, With Iris Diaphragm & Filter Holder, Moving Range 22mm-71mm	●	●
Focusing	Coaxial Coarse & Fine Focus, With Coarse Adjustment Stop Screw And Tightness Adjustment, Focusing Range 13mm With Clip Stage, (7mm With Mechanical Stage), Fine Precision 0.004mm	●	●
Light	0.2W LED(5700-6500K), Intensity Adjustable	●	●
Power	Adapted Power Supply 100-240V/12V 3.3A	●	●



# A31.0925

WIFI Digital Biological Microscope,  
5.0M, Win, iMac, iOS, Android

**OPTO-EDU**



Binocular Head Built-in WIFI Camera 5.0MP  
Software For Win, iMac, App For IOS, Android  
Plan Achromatic 4x,10x,40x(S),100x(O,S)  
Double Layer Mechanical Stage 132x140mm  
Abbe N.A.1.25, With Iris Diaphragm, Fixed But Center Adjustable

## A31.0925-5M

Head	Binocular Head, 30° Inclined, Diopter Adjustable +/-5°, Interpapillary Distance 50~75mm, Built-in WIFI Camera, 5MP. With Pad Holder
Objective	Plan Achromatic 4x,10x,40x(S),100x(O,S)
Eyepiece	PL 10x/18mm
Nosepiece	Backward, Quadruple Nosepiece
Working Stage	Double Layer Mechanical Stage, Size 132*140mm, Moving Range 50*76mm, Precision 0.1mm
Condenser	Abbe N.A.1.25, With Iris Diaphragm, Fixed But Center adjustable
Focusing	Low Position Designed, Coaxial Coarse & Fine Focusing, Coarse Focusing Range 25mm, Fine Focusing Scale 0.002mm, With Tension Adjustment, With Upper Safety Stop
Light Source	3W LED High Brightness

# A31.0927

WIFI Digital Biological Microscope, 5.0M, 12M, Win, iMac, iOS, Android

**OPTO-EDU**



Binocular Head, Built-in WIFI Camera, 5MP/12MP  
Software For Win, iMac, App For iOS, Android  
Infinity Color Corrected Optical System  
N.A.1.25 Compound Eye Illumination Condenser Group  
150mmx140mm Mechanical Stage, Moving Range:76mm-50mm, Precision 0.1mm  
(Triangular Guide Rail)

A31.0927		5M	12M
Head	Binocular Head, Built-in WIFI Camera, 5MP.	•	
	Binocular Head, Built-in WIFI Camera, 12MP.		•
Optical system	Infinity Color Corrected Optical System	•	•
Viewing Head	30° Inclined, Gemel Binocular Head, Interpupillary Distance 47mm-75mm.	•	
Eyepiece	PL10x/20mm	•	•
Nosepiece	Reversed Quadruple Nosepiece	•	•
Objective	Plan Achromatic Objective 4x/0.10, WD=11.9mm	•	•
	Plan Achromatic Objective 10x/0.25, WD=12.1mm	•	•
	Plan Achromatic Objective 40x/0.65, WD=0.36mm	•	•
	Plan Achromatic Objective 100x/1.25, WD=0.18mm	•	•
Focusing Mechanism	Low Position Coaxial Focusing Mechanism, Coarse Range: 25mm, Fine Precision: 0.002mm, With Tension Adjustment And Upper Limit	•	•
Working Stage	150mmx140mm Mechanical Stage, Moving Range:76mm-50mm, Precision 0.1mm (Triangular Guide Rail)	•	•
Illumination	N.A.1.25 Compound Eye Illumination Condenser Group (With Plug-in Phase Contrast And Dark Field Accessories' Interface), Condenser Preset Center, Adaptive 100V-240V Switching Power Supply, Single High Brightness 3W LED Light Intensity Can Be Continuously Adjusted	•	•

# A31.1006

## Digital Microscope, 1.3M

**OPTO-EDU**



1.3M USB2.0 Built-in Digital Camera Monocular & Binocular Head  
 Total Magnification 40x-1000x With Achromatic Optical System  
 Double Layers Mechanical Stage 115×125mm/70×20mm  
 With Software For Measurement, Support Win7, Win10  
 1W Powerful LED Illumination, Brightness Adjustable

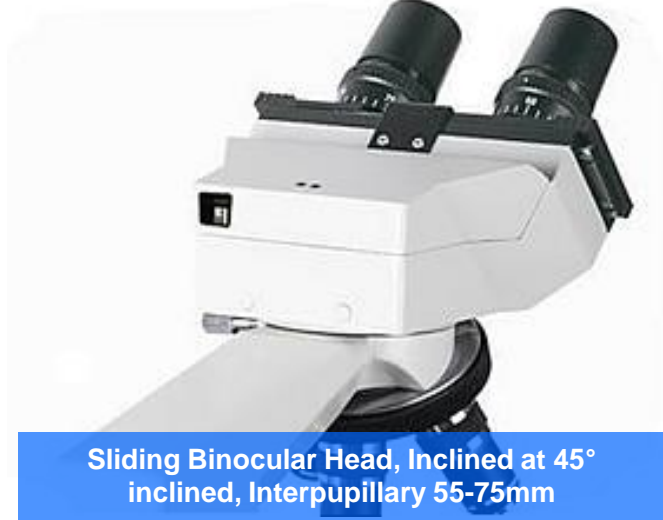
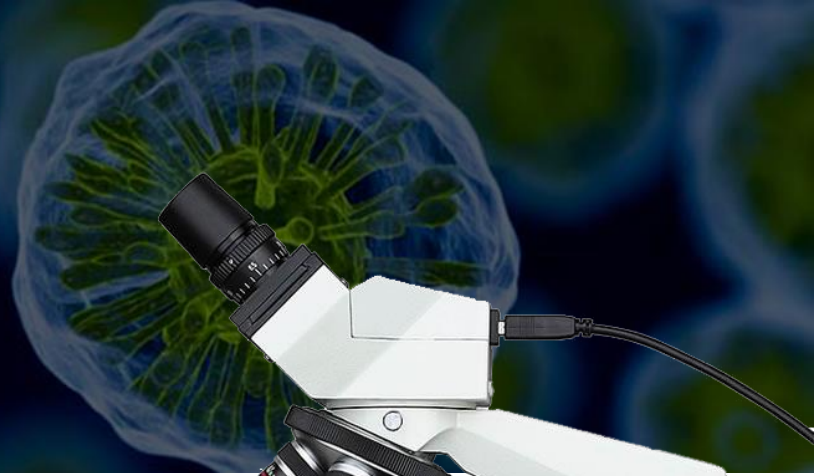
Items	A31.1006 Digital Biological Microscope	A	B
Head	Monocular head, Inclined at 45°, 360°rotatable	•	
	Binocular head, Inclined at 45°, 360°rotatable		•
Eyepiece	WF10x/18		
Objective	Achromatic 4x		
	Achromatic 10x		
	Achromatic 40x		
	Achromatic 100x		
Nosepiece	Quadruple Nosepiece		
Stage	Double Layers Mechanical Stage 115×125mm/70×20mm		
Condenser	Abbe N.A.=1.25 with iris diaphragm(Φ2-Φ28mm)and frosted filter		
Camera System	Valid Pixel 1280×1024(1.3M Pixel)		
	Output Mode USB2.0		
	Operation System WINDOWS 2000/XP/VISTA 32 Bit or 64 Bit		
	Software ScopelImage 9.0		
Illumination	1W Powerful LED Illumination, brightness adjustable		



# A31.1007

## Digital Microscope

**OPTO-EDU**



**Sliding Binocular Head, Inclined at 45° inclined, Interpupillary 55-75mm**



1.3M/2.0M USB2.0 Built-in Digital Camera Binocular Head  
 Total Magnification 40x-1000x With Achromatic Optical System  
 Double Layers Mechanical Stage 140x140mm/75x50mm  
 With Software For Measurement, Support Win7, Win10  
 1W Powerful LED Illumination, Brightness Adjustable

A31.1007 Digital Biological Microscope		1.3M	3.0M
Head	Sliding Binocular Head, Inclined at 45° inclined, Interpupillary 55-75mm		
	Digital Camera 1.3M Pixels, 1280x1024	•	
	Digital Camera 3.0M Pixels, 2048x1536		•
	USB 2.0 Output		
	Operation System: Windows 2000/XP/Vista		
	Software : ScopelImage Plus Range of Viewing Field >75%		
Eyepiece	WF10x/18		
Nosepiece	Forward Quadruple Nosepiece		
Objective	Achromatic 4x		
	Achromatic 10x		
	Achromatic 40x		
	Achromatic 100x		
Stage	Double Layers Mechanical Stage 140X140mm/75X50mm		
Condenser	Abbe N.A.=1.20 with Iris Diaphragm & Filter		
Focusing	Coaxial Coarse & Fine Focus Adjustment, Moving Range:28mm, Fine Division 0.002mm		
Light Source	Halogen Lamp 6V/20W , with brightness adjustable, 110V/220V		
Optional Accessories			
Eyepiece	P16x/11	A51.1002-16	
Phase Contrast Kit		A5C.1009	
Dark Field		A5D.1014	
Polarization		A5P.1007	

# A31.5121

## Digital Biological Microscope, 5.0M

OPTO-EDU



M5.0M Digital Camera Built-in Monocular Or Trinocular Head With Total Magnification 40x-1000x Achromatic Optical System  
Double Layer Mechanical Stage 115x125mm With Abbe N.A.1.25 Condenser  
Coaxial Coarse & Fine Focusing Knob LED Light Source Brightness Adjustable  
With 10 Prepared Slides, With Experiment Kit, Pack In Hand Carry Case+Carton

## Specification

A31.5121 Digital Biological Microscope, 5.0M		-M	-T
Head	Teaching Head, 45°+90° Inclined, 360° Rotatable	o	
	Binocular Head, 30° Inclined, 360° Rotatable		
	Trinocular Head, 30° Inclined, 360° Rotatable		o
Digital Camera	5.0M CMOS Digital Camera, With 0.3x C-Mount		
Output	USB 2.0, Output to PC or Mobile Phone		
Software	CD With Measuring Software Strange View, Support Win/iMac Computer		
Language	Support Chinese, English, Russia, Ukrian		
Eyepiece	WF10x, WF16x		
Nosepiece	Quadruple Nosepiece, Ball Bearing Inner Locating		
Objective	Achromatic 4x,10x,40x(s), 100x(s, oil)		
Working Stage	Double Layer Mechanical Stage 115*125mm		
Focusing	Coaxial Coarse & Fine Focus Knob, Coarse Focusing Range 20mm		
Condenser	Abbe Condenser N.A.1.25, With Iris Diaphragm Filter		
Light Source	LED, Brightness Adjustable		
Accessory	Prepared Slide 10pcs in Box, Experiment Kit, Mobile Phone Connector		
Packing	Hand Carry Box + Master Carton		



# A33.0913

## 9" LCD Digital Biological Microscope, 5.0M HDMI+USB

**OPTO-EDU**



USB & TF Card Output



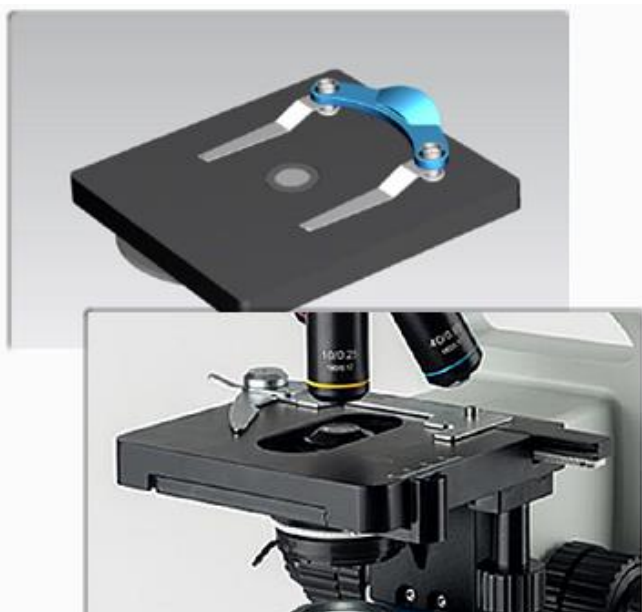
9" HD LCD Screen With Measure, Photo, Video Function

5.0M HDMI Mouse Control+ USB2.0 Digital Camera With TF Card

Double Layers Mechanical Stage 115x125mm Coaxial Course & Fine Focusing

LED Light Source Brightness Adjustable, With Built-in Rechargeable Battery Module & LED Indicator

Power By USB Adapter or USB Bank, Computer USB Port



Single Layer Working Stage 110x120mm With Quick Slide Clip, Double Layer Mechanical Stage 115x125mm Optional



LED Light Source Brightness Adjustable, With Built-in Rechargeable Battery Module & LED Indicator



# Product Specification

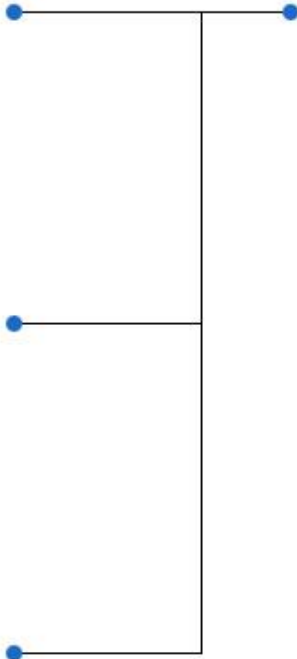
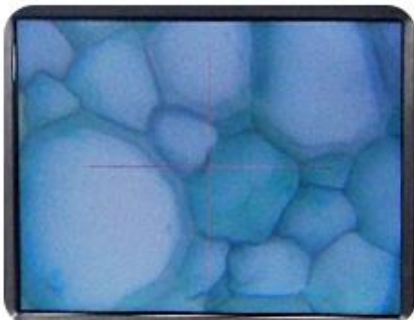
A33.0913 Biological Microscope Specification	
Head	Trinocular Head 30° Inclined, 360° Rotatable, Inter-pupillary Distance 50~75mm, Light Splitting Ratio Fixed 50:50
Eyepiece	WF Plan Eyepiece 10x/18mm With Eye Guard
Nosepiece	Reversed Quadruple Nosepiece
Objective	Achromatic Objectives 4x/0.10(Black)
	Achromatic Objectives 10x/0.25(Black)
	Achromatic Objectives 40xS/0.65(Black)
	Achromatic Objectives 100xS/1.25(Oil)(Black)
Working Stage	115x125mm Double Layers Mechanical Stage, With N.A.1.25 Abbe Condenser, With Iris Diaphragm & Filter Holder, Moving Range 22mm-71mm
Focusing	Coaxial Coarse & Fine Focus, With Coarse Adjustment Stop Screw And Tightness Adjustment, Focusing Range 13mm With Clip Stage, (7mm With Mechanical Stage), Precision 0.002mm
Light	0.2W LED Center Presetting, Intensity Adjustable
Power	External Wide Voltage AC Adapter Wide Range 100V~240V, Power By 5V1A DC Input or USB Charge, Without Battery.
Adapter	C-Mount 0.5x Focus Adjustable
Other	M4 Allen Key Focus Adjustable
	Package by Foam And Paper Master Carton
A33.0913 LCD Digital Camera Specification	
Sensor	1/2.8"Sony Star Light Level CMOS Sensor
Resolution	5.0M CMOS
LCD Screen	9"LCD, Resolution 1024x600 High Clearance Screen
Output	USB 2.0 Type-A, TF Card
Pixel Size	2.0x2.0um
Power Supply	DC 12V/2A Power Adapter, Input 100-240V AC
Function	Photo, Video, Measure, Compare
	Support <b>USB Mouse Control</b> To Capture Photo, Video, Measure, Setting
	USB 2.0 To Win 7, Win10 System, Software S-Eye Included
	Brightness, Contrast, Exposure, White Balance Adjustable
	10x Digital Zoom, 4 Split/ 2 Split Windows Image Compae
	Storage To TF Card
Size / Weight	Cross Line With Scale, Calibrated
	Net Line 8 Kinds, Width & Color Adjustable
Standard Package	Product Size 225x52x175mm, Net Weight 0.7Kg LCD Camera, USB 2.0 Cable, Mouse, DC12V Power Adapter
<b>USB Mouse Control Operation Manual</b>	1. Insert the mouse into the camera Type-A USB 2.0 port, connect 12V power supply to camera.
	2. Turn on the power switch, when the camera is running, the LED light turns blue
	3. Move the mouse to the top left corner of the screen to call up the <b>MAIN MENU</b> , including icon : Take Photo, Record Video, Preview, Measure, Setting.
	4. Move the mouse to the middle position at the bottom of the screen to call up the <b>QUICK MENU</b> , including icon: Zoom In, Zoom Out, Up/Dow Mirror, Left/Right Mirror, Black/White, HDR, Freeze, Net, Font, 2 Split, 4 Split
	5. Click the <b>MEASURE</b> icon to pop up the measure window, which support over 20 kinds of measurement graphics.
	6. Click the EDIT button and fill in the name of new ruler to <b>CALIBRATE</b> .Move the mouse to the corresponding standard scale in the image display window and draw a standard length scale line. Then fill in the length column and click SAVE to complete the calibration setting. If you want to add more ruler, just repeat above steps.
	7.Click mm/PX to open or close the screen scale.
	8. If the USB port is directly connected to the computer, the screen and the computer can be displayed synchronously (the USB cable must be connected to the computer before the device is powered on)

# A33.1501

3.5" LCD Digital Microscope, 2.0M

**OPTO-EDU**

3.5" LCD Screen + 2.0M Digital Camera All-in-One Head  
Optical Magnification 40x-640x, Digital Magnification 24x  
Eyepiece WF10x, 16x, Objective 4x, 10x, 40x(S)  
Internal Memory 128MB + SD Card Slot + USB2.0 Output  
Cordless Batteries With External Adapter Included



# Product Specification



## A33.1501 3.5" LCD Digital Microscope, 2.0M

Head	Monocular Head, 45° Inclined
Eyepiece	WF10x,16x
Objectives	4x,10x,40xs
Focusing	Coarse Focusing Knob,Focusing Range: 20mm
Stage	Single Layer W. Vernier Scale Stage, Size: 90x95mm, Moving Range 30x60mm
Condenser	Single LensCondenser,6 Holes Disc Diaphragm
Light Source	Up & Bottom LED Light, Both Brightness Adjustable
Power	Cordless Batteries (3xAAA Batteries NOT Included) Adapter Included (110V/220V Optional)
Screen	3.5"LCD
Memory	Internal Memory 128MB
Slot	SD Card Slot, 2G SD Card Included
Output	USB2.0 Output
TV Output	NTSC,PAL
COMS Camera	2.0M 1600*1200
LCD Resolution	12M(4023*3024)
	8M(3264*2448)
	5M(2560*1290)
	3M(2048*1536)
	2M(1600*1200)
	1.3(1280*1024)
Quality	Fine,Standard Economy
EV	You Can Select EV From-2.0----+2.0
White Balance	Auto For The Default
ISO	Auto For The Default
Color	Standard,Vivid,Sepia,Monochrome
Saturation	Normal,High,Low
Sharpness	Normal,Normal,Soft
Time Stamp	Off, Date Only(Can Show The Date On The Picture Or Video),Date&Time(Can Show The Date And Time On The Picture Or Video)
Language	There Are 9 Kinds Of Language. The Default Is English.

## Standard Accessories

Packing Box	Packed In Suitcase Packing Box
Experimentation Appliance	Plastic Microtom 1 pc
	Hatching Box 1 pc
	Tweezer 1pc
	Sea Salt 1 Bottle
	Yeast 1 Bottle
	Worm Eggs 1 Bottle
	Glue 1 Bottle
	Blank Slides 5 pcs, Prepared Slides 5 pcs, In 1 Box



# A33.1511

## 4.3" LCD Digital Microscope, 2.0M

**OPTO-EDU**



Aquaculture



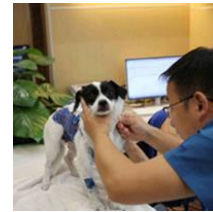
Beauty mites



Children's Science



Research



Pet Hospital



School

All-in-On 4.3" LCD Screen 8.0M Resolution, With Built-in HD Digital Camera 2.0M  
 High Quality Achromatic Objective 10x, 20x, 40x On Triple Nosepiece  
 Plain Stage with Vernial Scale With Disc Diaphragm Condenser  
 Dual Light Up/Bottom LED, Brightness Adjustable For Watching Prepared Slide Or Small Objective  
 Powered By USB Adapter or By USB Port of Computer, USB Bank For Outdoor Work

A33.1511, A33.1512, A33.1513 LCD Digital Microscope, 2.0M		A33.1511	A33.1512	A33.1513
Magnification	Total Magnification 70x~280x on 4.3" LCD Screen	●		
	Total Magnification 130x~520x on 7" LCD Screen		●	●
LCD	4.3" LCD Screen, 3 Buttons, LCD Menu Support Brightness/Contrast/Color Adjust, Switch Between 16:9/4:3 Modes, Viewing Area 95*55mm, Support 10 Languages.	●		
	7.0" LCD Screen, 7 Buttons LCD, Menu Support Brightness/Contrast/Color Adjust, Switch Between 16:9/4:3 Modes, Viewing Area 155*85mm, Support 10 Languages. <a href="#">Simple Measure Function</a> , By Cross Scale Line With Setted Scale For 4x,10x,40x.		●	●
Camera	HD Digital Camera 2.0M All-in-One Design	●	●	●

Objective	Achromatic 10x/0.25, 20x/0.4x, 40x/0.65(Spring)	•	•	•
Nosepiece	Outward Triple With Clip Stop	•	•	•
Working Stage	Single Layer Working Stage 105x105mm, With Vernial Scale Ruler Moving Range 50x30mm	•		
	Double Layers Mechanical Stage 105x105mm, Moving Range 50x30mm		•	
	Single <b>Layer Heating Stage</b> 105x105mm, With Vernial Scale Ruler Moving Range 50x30mm 1. The Heating Stage Will Auto Heated to 38° When Power Switch On. 2. Push +/- To Set The Temperature From 15°to 50°, It will Reach Set Temperature Slowly. 3. Real Time Temperature Is Shown On the Window			•
Condenser	Single Lens Condenser	•		•
	Abbe Condenser With Iris Diaphragm		•	
Focusing	Coaxial Coarse & Fine Focusing Knob, Focusing Range 16mm	•	•	•
Illumination	Dual Light Up/Bottom LED, Brightness Adjustable	•	•	•
Power	Powered By USB 5V Charger, Input AC100V-240V 50/60HZ, or By USB Port of Computer, USB Bank For Outdoor Work	•	•	
	Powered By USB 12V5A Charger			•
Accessory	Full Set Accessory Kit,	•	•	•
Packing	With Carry Box, Packed In Master Carton, 25*31*43cm/3Kgs	•	•	•



4.3" HD LCD  
2.0M Digital Camera

Triple Nosepiece  
Achromatic 10x20x40x  
Clear Imaging



Dual Light  
Up/Bottom LED



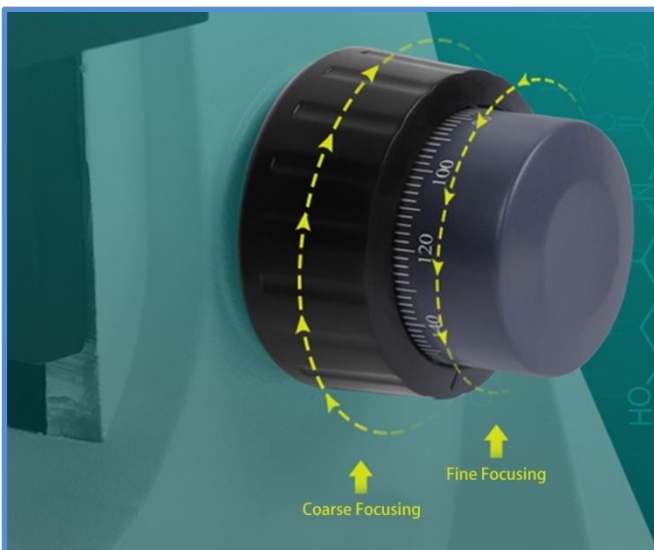
# A33.1512

## 7" LCD Digital Microscope, 2.0M

**OPTO-EDU**



All-in-On 7" LCD Screen With Built-in HD Digital Camera 2.0M  
High Quality Achromatic Objective 10x, 20x, 40x On Triple Nosepiece  
Double Layers Mechanical Stage With Abbe Condenser And Iris Diaphragm  
Dual Light Up/Bottom LED, Brightness Adjustable For Watching Prepared Slide Or Small Object  
Powered By USB Adapter or By USB Port of Computer, USB Bank For Outdoor Work



Elegant Smooth Design, Heavy Metal Base  
Supply Steady Stand For Firm View.



Vernier Scale Stage, With Single Lens Condenser

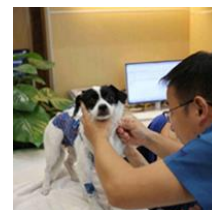


# Product Specification

A33.1511, A33.1512, A33.1513 LCD Digital Microscope, 2.0M		A33.151 1	A33.151 2	A33.151 3
Magnification	Total Magnification 70x~280x on 4.3" LCD Screen	●		
	Total Magnification 130x~520x on 7" LCD Screen		●	●
LCD	4.3" LCD Screen, 3 Buttons, LCD Menu Support Brightness/Contrast/Color Adjust, Switch Between 16:9/4:3 Modes, Viewing Area 95*55mm, Support 10 Languages.	●		
	7.0" LCD Screen, 7 Buttons LCD, Menu Support Brightness/Contrast/Color Adjust, Switch Between 16:9/4:3 Modes, Viewing Area 155*85mm, Support 10 Languages. Simple Measure Function, By Cross Scale Line With Setted Scale For 4x,10x,40x.		●	●
Camera	HD Digital Camera 2.0M All-in-One Design	●	●	●
Objective	Achromatic 10x/0.25, 20x/0.4x, 40x/0.65(Spring)	●	●	●
Nosepiece	Outward Triple With Clip Stop	●	●	●
Working Stage	Single Layer Working Stage 105x105mm, With Vernial Scale Ruler Moving Range 50x30mm	●		
	Double Layers Mechanical Stage 105x105mm, Moving Range 50x30mm		●	
	Single Layer Heating Stage 105x105mm, With Vernial Scale Ruler Moving Range 50x30mm			
	1. The Heating Stage Will Auto Heated to 38° When Power Switch On. 2. Push +/- To Set The Temperature From 15°to 50°, It will Reach Set Temperature Slowly. 3. Real Time Temperature Is Shown On the Window			●
Condenser	Single Lens Condenser	●		●
	Abbe Condenser With Iris Diaphragm		●	
Focusing	Coaxial Coarse & Fine Focusing Knob, Focusing Range 16mm	●	●	●
Illumination	Dual Light Up/Bottom LED, Brightness Adjustable	●	●	●
Power	Powered By USB 5V Charger, Input AC100V-240V 50/60HZ, or By USB Port of Computer, USB Bank For Outdoor Work	●	●	
	Powered By USB 12V5A Charger			●
Accessory	Full Set Accessory Kit,	●	●	●
Packing	With Carry Box, Packed In Master Carton, 25*31*43cm/3Kgs	●	●	●



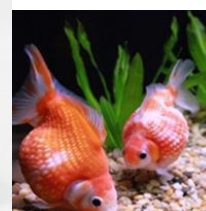
Research



Pet Hospital



School



Aquaculture



Beauty mites

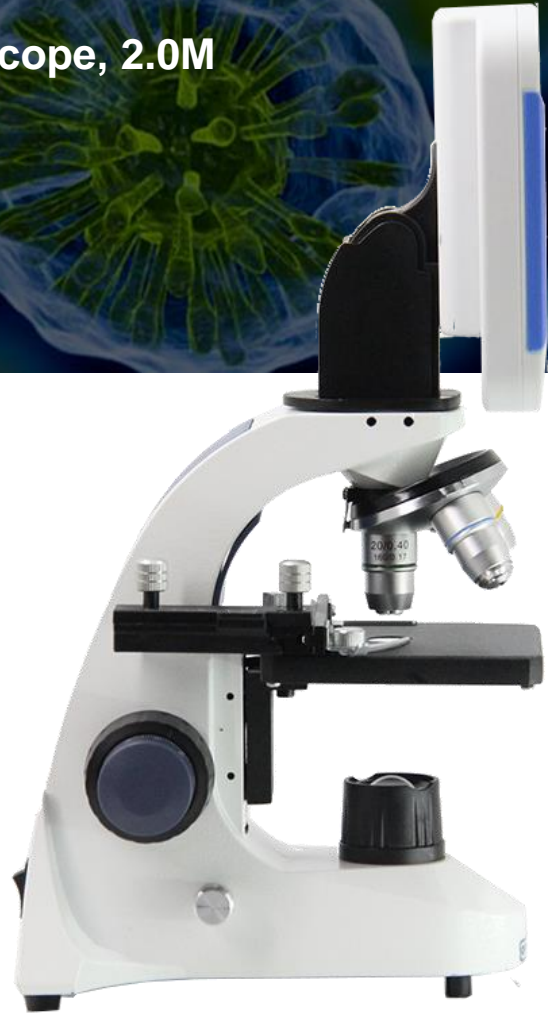


Children's Science

# A33.1513

## 7" LCD Digital Heating Stage Microscope, 2.0M

**OPTO-EDU**



All-in-On 7" LCD Screen With Built-in HD Digital Camera 2.0M  
High Quality Achromatic Objective 10x, 20x, 40x On Triple Nosepiece  
Heating Stage 105x105/50x30mm, Temperature Control 15~50°  
Dual Light Up/Bottom LED, Brightness Adjustable For Watching Prepared Slide Or Small Object  
Powered By USB Adapter or By USB Port of Computer, USB Bank For Outdoor Work



LCD Screen 45° Tiltable, Ergonomic Design To Meet Observations From Different Directions Easily.



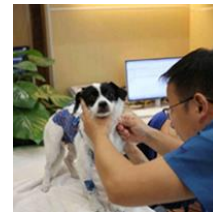
Push +/- To Set The Temperature From 15°to 50°, It will Reach Set Temperature Slowly.

# Product Specification

A33.1511, A33.1512, A33.1513 LCD Digital Microscope, 2.0M		A33.151 1	A33.151 2	A33.151 3
Magnification	Total Magnification 70x~280x on 4.3" LCD Screen	●		
	Total Magnification 130x~520x on 7" LCD Screen		●	●
LCD	4.3" LCD Screen, 3 Buttons, LCD Menu Support Brightness/Contrast/Color Adjust, Switch Between 16:9/4:3 Modes, Viewing Area 95*55mm, Support 10 Languages.	●		
	7.0" LCD Screen, 7 Buttons LCD, Menu Support Brightness/Contrast/Color Adjust, Switch Between 16:9/4:3 Modes, Viewing Area 155*85mm, Support 10 Languages. Simple Measure Function, By Cross Scale Line With Setted Scale For 4x,10x,40x.		●	●
Camera	HD Digital Camera 2.0M All-in-One Design	●	●	●
Objective	Achromatic 10x/0.25, 20x/0.4x, 40x/0.65(Spring)	●	●	●
Nosepiece	Outward Triple With Clip Stop	●	●	●
Working Stage	Single Layer Working Stage 105x105mm, With Vernial Scale Ruler Moving Range 50x30mm	●		
	Double Layers Mechanical Stage 105x105mm, Moving Range 50x30mm		●	
	Single Layer Heating Stage 105x105mm, With Vernial Scale Ruler Moving Range 50x30mm			
	1. The Heating Stage Will Auto Heated to 38° When Power Switch On. 2. Push +/- To Set The Temperature From 15°to 50°, It will Reach Set Temperature Slowly. 3. Real Time Temperature Is Shown On the Window			●
Condenser	Single Lens Condenser	●		●
	Abbe Condenser With Iris Diaphragm		●	
Focusing	Coaxial Coarse & Fine Focusing Knob, Focusing Range 16mm	●	●	●
Illumination	Dual Light Up/Bottom LED, Brightness Adjustable	●	●	●
Power	Powered By USB 5V Charger, Input AC100V-240V 50/60HZ, or By USB Port of Computer, USB Bank For Outdoor Work	●	●	
	Powered By USB 12V5A Charger			●
Accessory	Full Set Accessory Kit,	●	●	●
Packing	With Carry Box, Packed In Master Carton, 25*31*43cm/3Kgs	●	●	●



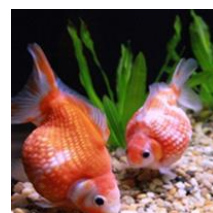
Research



Pet Hospital



School



Aquaculture



Beauty mites



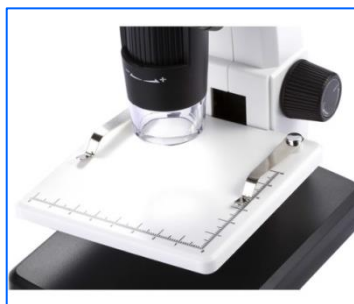
Children's Science



# A33.5001

## 3.5"LCD Digital Microscope, 500x,5.0M

**OPTO-EDU**



5.0 Mega Pixels True Resolution, Max 12.0M Still Capture Photo  
3.5" LCD Screen Real Time Sharp & Clear Image  
Total Magnification 20x To 200x, 500x  
Frame Rate Max 30 Fps, With Measurement Software  
Rechargeable Lithium Battery (Recharged By Adaptor Or USB)

### A33.5001 3.5"LCD Digital Microscope, 500x,5.0M

Image Sensor:	5 Mega Pixels (True Resolution)
LCD Panel	3.5inches
Still Capture Resolution	12M, 9M, 5M, 3M, 1.3M, VGA
Video Capture Resolution	12M, 9M, 5M, 3M, 1.3M, VGA
Focus Range	Manual Focus From 10mm To 50mm
Frame Rate	Max 30f/s Under 600 Lus Brightness
Magnification Ratio	20x To 200x, 500x
TV Output	Available (To Any Monitor With TV In)
Card Slot	Support MicroSD Card Slot Up To 32GB SDHC
Light Source	8 LED (Adjustable By Control Wheel)
Battery	Rechargeable Lithium Battery (Recharged By Adaptor Or USB)
Measurement	By Software (Portable Caputure With OSD Language: English, German, Spanish, French, Russian)
OSD Language	English, German, Spanish, French, Russian
Bundle Software	MicroCapture With measurement
Product Size	L149mm*W104mm*H227mm
Weight	1100g
Certificates	With CE, FCC Approval, RoHS Compliance
Warranty	1 year

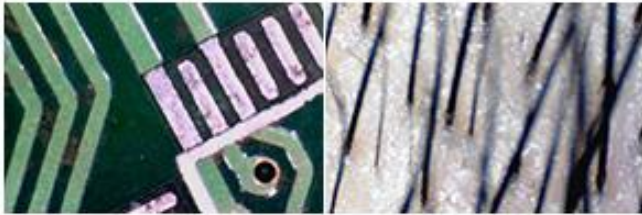
# A33.5006

4.3" LCD Digital Microscope, 8.0M, 600x

**OPTO-EDU**



Circuit board and hair



Max 8.0M Still Capture Resolution

4.3" LCD Screen With Focus Knob, Menu, Video & Photo Knob

Magnification 600x, Data Output To Micro SD Card Or VGA

Powered By DC 5V1A Adapter With Rechargeable Batteries

Measure Software For Windows 7/8/10, Mac, Android

## A33.5006 4.3-inch LCD Inspection Microscope Specification

Magnification Ratio	600x
Still Capture Resolution	8M, 5M, 3M, 1.3M, VGA
Focus Range	Manual Focus From 5mm To 80mm
Frame Rate	Max 30f/s Under 600 Lus Brightness
Video Format	AVI
Photo Format	JPEG
Light Source	LEDs (Brightness Adjustable)
Battery	Built-in Li-ion Battery
DC Input	5V/1A
TV-out	To Any Monitor With TV-in
Storage	Micro-SD Card
Bundle Software	Portable Capture Plus With Measurement
Operation System For Bundle Software	Windows 7/8/10 Mac OS X 10.12 Or Above Android Smartphone/Tablet
Product Size	116mm (L) x 95mm (W)
Weight	Microscope-220g; Stand-220g
Package Contents	Microscope Observation Stand Software CD USB Cable TV Cable Micro-SD Card (1GB) User's Manual

# A33.5100

## 7" LCD Digital Heating Stage Biological Microscope

**OPTO-EDU**



Heating Stage Temperature Adjustable Range 30°~50° For Blood, Sperm View  
Total Optical Magnification 40x~640x, Digital Magnification 200x~2000x On Screen  
Coaxial Coarse & Fine Focusing Knob, Focus Range 20mm  
Transmit Light Source LED Brightness Powered By 12V DC Adapter





## Specification & Packing

A33.5100 7" LCD Heating Stage Biological Microscope	
LCD & Digital Camera	
LCD	1/2.75" CMOS
Sensor	1/2.75" CMOS
Resolution	2.0M 1920x1080p, With 0.3x C-Mount
Pixel Size	2.8x2.8um
Frame Rate	30 fps
Output	USB 2.0, Output to LCD, PC or Mobile Phone
Power	DC5V/2A, Power Port 3.5/1.35 DC
Storage	Micro SD Card Slot, Support Class 10 Max 32G
LCD Menu	One Key Switch Image From Main Camera & Hand-held Camera
	One Key Take Photo, Video, Record, Save to SD Card
	Set Color, Contrast, White Balance Auto/Manual Adjust
	Set Photo/ Video Resolution Adjust, Mic On/Off to Record Voice With Video
	Set Date, Time
PC Software	Choose Language: Chinese, Traditional Chinese, English, Japanese, France, Germany, Korea, Russia, Italy, Portuguese, Spanish, Arabic
	Playback Photo, Video
PC Software	CD With Measuring Software Strange View, Support Win/iMac Computer, Support Language Chinese, English, Russia, Ukrian
Microscope	
Head	Teaching Head, 45°+90° Inclined, 360° Rotatable
Eyepiece	WF10x, WF16x
Nosepiece	Triple Nosepiece, Ball Bearing Inner Locating
Objective	Achromatic 4x, 10x, 40x(s)
Working Stage	Heated Stage 37°C-38°C, Size 115mmx125mm, Moving 60mmx30mm
Focusing	Coaxial Coarse & Fine Focus Knob, Coarse Focusing Range 20mm
Condenser	Abbe Condenser With Iris Diaphragm
Light Source	LED, Brightness Adjustable, Powered By 5V DC Adapter
Heating Set	S Key: Long Press: On/Off Short Press: Set Temp.
Accessory	Prepared Slide 10pcs in Box, Experiment Kit, Mobile Phone Connector Power Adapter Power Cord USB Cable Software CD
Packing	Aluminium Box + Master Carton



# A33.5102

## 7" LCD Digital Heating Stage Biological Microscope

**OPTO-EDU**



Dual Optical System: 7" LCD Digital Camera + USB Portable Digital Microscope  
Total Magnification 40x-640x Achromatic Optical System  
Double Layer Mechanical Stage 115x125mm With Disc Condenser  
Coarse & Fine Focusing Knob With Insert LED Light Source Brightness Adjustable  
With 10 Prepared Slides, With Experiment Kit, Pack In Hand Carry Case+Carton

## Specification

### A33.5102 7" LCD Biological Digital Microscope, 2.0M

LCD Screen	7" IPS Screen, With Touch Button To Take Photo & Video, 2.0M, 30fps
Head	Mono Straight Head
Eyepiece	WF10x, WF16x
Nosepiece	Triple
Objective	Achromatic 4x10x40x
Working Stage	Mechanical Stage
Focusing	Coarse & Fine Focusing
Illumination	Insert LED
TF Card Output	Support Max 32G, To Take Photo & Video
USB Output	To Win/Mac, With Professional StrangeView Measuring Software
Power Supply	DC Adapter, Can Be Powered By USB Power Bank For Outdoor Use
Package	Color Box + Foam, 1 pc/1 Box, With Software Disc, DC Adapter, Instruction Manual



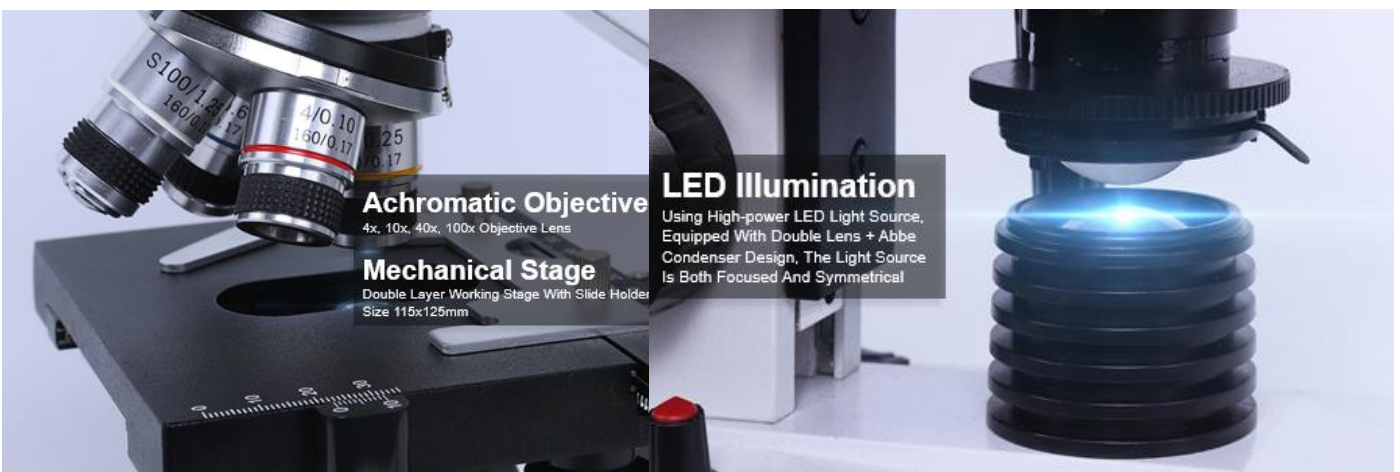
# A33.5121

## 7" LCD Biological + USB Portable Dual Lens Digital Microscope, 2.0M

**OPTO-EDU**



Dual Optical System: 7"/9" LCD Digital Camera + USB Portable Digital Microscope  
Total Magnification 40x-1000x Achromatic Optical System  
Double Layer Mechanical Stage 115x125mm With Abbe N.A.1.25 Condenser  
Coaxial Coarse & Fine Focusing Knob LED Light Source Brightness Adjustable  
With 10 Prepared Slides, With Experiment Kit, Pack In Hand Carry Case+Carton



### Achromatic Objective

4x, 10x, 40x, 100x Objective Lens

### Mechanical Stage

Double Layer Working Stage With Slide Holder  
Size 115x125mm

### LED Illumination

Using High-power LED Light Source,  
Equipped With Double Lens + Abbe  
Condenser Design, The Light Source  
Is Both Focused And Symmetrical



# Specification

A33.5121 9" LCD Biological + USB Portable Dual Lens Digital Microscope, 5.0M		-M	-MH	-T	-TH
Head	Teaching Head, 45°+90° Inclined, 360° Rotatable	o	o		
	Binocular Head, 30° Inclined, 360° Rotatable				
	Trinocular Head, 30° Inclined, 360° Rotatable			o	o
LCD Camera	7" IPS LCD Screen Resolution 800x480				
Sensor	1/2.75" CMOS				
Resolution	2.0M 1920x1080p, With 0.3x C-Mount				
Pixel Size	2.8x2.8um				
Frame Rate	30 fps				
Output	USB 2.0, Output to LCD, PC or Mobile Phone				
Power	DC5V/2A, Power Port 3.5/1.35 DC				
Storage	Micro SD Card Slot, Support Class 10 Max 32G				
LCD Menu	One Key Switch Image From Main Camera & Hand-held Camera				
	One Key Take Photo, Video, Record, Save to SD Card				
	Set Color, Contrast, White Balance Auto/Manual Adjust				
	Set Photo/ Video Resolution Adjust, Mic On/Off to Record Voice With Video				
	Set Date, Time				
	Choose Language: Chinese, Tranditional Chinese, English, Japanese, France, Germany, Korea, Russia, Italy, Portuguese, Spanish, Arabic				
	Playback Photo, Video				
PC Software	CD With Measuring Software Strange View, Support Win/iMac Computer, Support Language Chinese, English, Russia, Ukrian				
Hand-held	USB Portable Digital Microscope 1.3M, 1.5x-25x	-	o	-	o
Eyepiece	WF10x, WF16x				
Nosepiece	Quadruple Nosepiece, Ball Bearing Inner Locating				
Objective	Achromatic 4x,10x,40x(s), 100x(s, oil)				
Working Stage	Double Layer Mechanical Stage 115*125mm				
Focusing	Coaxial Coarse & Fine Focus Knob, Coarse Focusing Range 20mm				
Condenser	Abbe Condenser N.A.1.25, With Iris Diaphragm Filter				
Light Source	LED, Brightness Adjustable				
Accessory	Prepared Slide 10pcs in Box, Experiment Kit, Mobile Phone Connector Power Adapter Power Cord USB Cable Software CD				
Packing	Hand Carry Box + Master Carton				

# A33.5505

4.3" OLED Digital Microscope, 3.6M 600x

**OPTO-EDU**



3.6M CMOS Digital Camera

4.3" LCD Screen With Focus Knob, Menu, Video & Photo Knob

Magnification 1x-600x, With Micro SD Card Support Max 64G

8 LEDs Brightness Adjustable, Built-in Battery for 6 Hours Working

Magic Stick Plate With Suction Cup For Any Smooth Surface

## A33.5505 4.3" OLED Digital Microscope, 600x

LCD	4.3"OLED
Pixels	3.6M Camera
Magnification	1~600x
Minimum Working Distance	15mm
Light Source	8 LEDs Brightness Adjustable, Built-in Battery for 6 Hours Working
System	Support 16 Languages
Light Source	8 LEDs Brightness Adjustable, Built-in Battery for 6 Hours Working
Size	200*170*80mm

# A33.5510

4.3" LCD Digital Microscope, 1000x, 2.0M

**OPTO-EDU**



bright Adjustment  
Support TF Card



8 LEDs



1080p 2.0M Pixels Resloution Digital Camera  
4.3 Inch TFT Screen 16:9 Real Time Sharp & Clear Image  
Total Magnification 1000x, Focusing Range 40mm  
Data Output To TF Card, USB 2.0  
8 LEDs Light Source Brightness Adjustable

## A33.5510 4.3" 1000X 1080P LED Digital Microscope

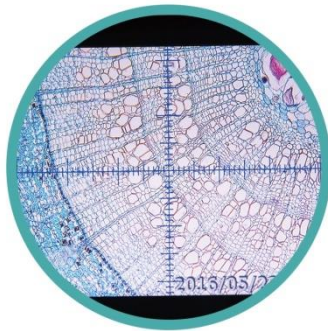
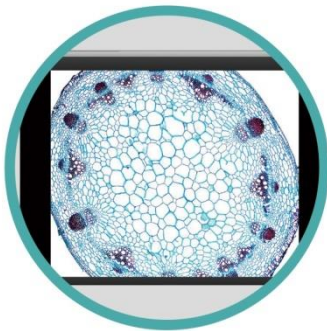
Image Sensor	2.0M High Quality Sensor
Magnification	50X-1000X
Screen	4.3 Inch TFT Screen, 16:9
Focusing Range	0-40mm
Resolution	1920*1080P,1280*960P,640*480P
Data Format	JPG/AVI
Light Source	8 LEDs(Brightness Can Be Adjusted)
Frame Rate	30 FPS
Interface	USB 2.0



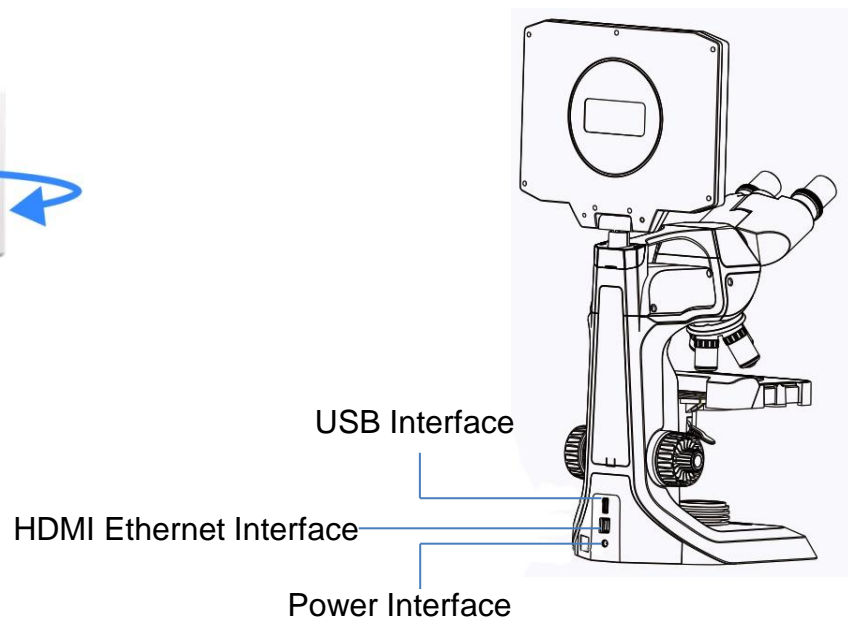
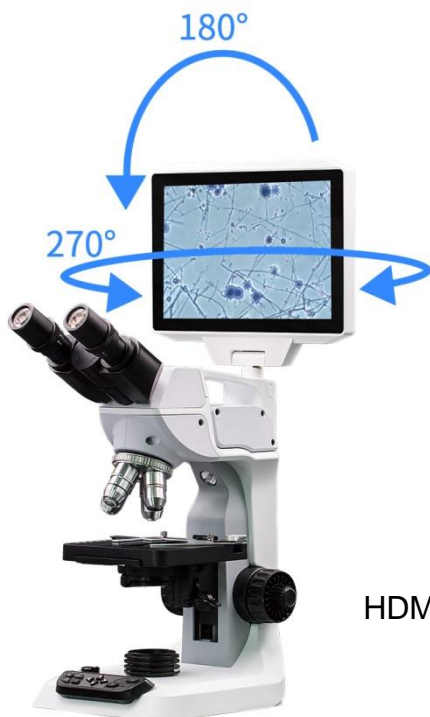
# A33.3712

## 10.1" LCD Digital Biological Microscope

**OPTO-EDU**



10.1" LCD Screen Full HD 1080p Display 5.0M,8.0M,16M Digital Camera Built-in  
Capture Picture & Video To TF Card, HDMI Output  
Infinity Achromatic Optical System 4x10x40x100x  
Biological & Stereo 1x Lens Low Power Combined In One  
Up & Bottom LED Light Source For All Specimen View



## Biological & Stereo Objective



Biological Objective



Stereo Objective

A33.3712 LCD Digital Biological Microscope Specification		5.0M	8.0M	16M
LCD Screen	10.1", Resolution 1920x1200p	●	●	●
External Interface	HDMI		●	●
Support External Devices	Display / Projector		●	●
Storage	TF Card	●	●	●
Video Resolution	1080p/30FPS	●	●	●
Photo Resolution	5.0 M	●		
	8.0 M		●	
	16M			●
Measuring	Crosshair	●	●	●
Positioning	Crosshair, Arrow Pointer Coordinate Colors Are Black, White, Red, Blue, Green	●	●	●
Feature	Biological Or Stereo	●	●	●
Magnification	40x-400x	●		
	10x-400x		●	
	10x-1000x			●
	64x-640x	○		
	16x-640x		○	
	16x-1600x			○
Eyepiece	WF10x/18mm	●●	●●	●●
	WF16x/13mm	○○	○○	○○
Nosepiece	Triple	●		
	Quadruple		●	
	Quintuple			●
Biological Objective	Infinity Plan Objective 4x/ 10x/ 40x	●	●	
	Infinity Plan Objective 4x/ 10x/ 40x/ 100x			●
Stereo Objective	Infinity Objective 1x		●	●
Focusing	Coaxial Coarse & Fine Focus	●	●	●
Working Stage	Double Layers Mechanical Stage 140x130/76x36mm	●	●	●
Condenser	Abbe	●	●	●
Illumination	Transmit & Side LED Light Source	●	●	●
Input Voltage	19V	●	●	●
Optional Accessories	Aluminum Box	○	○	○
	Aluminum Box With Tie Rod	○	○	○
	High-capacity Lithium Battery	○	○	○

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories.

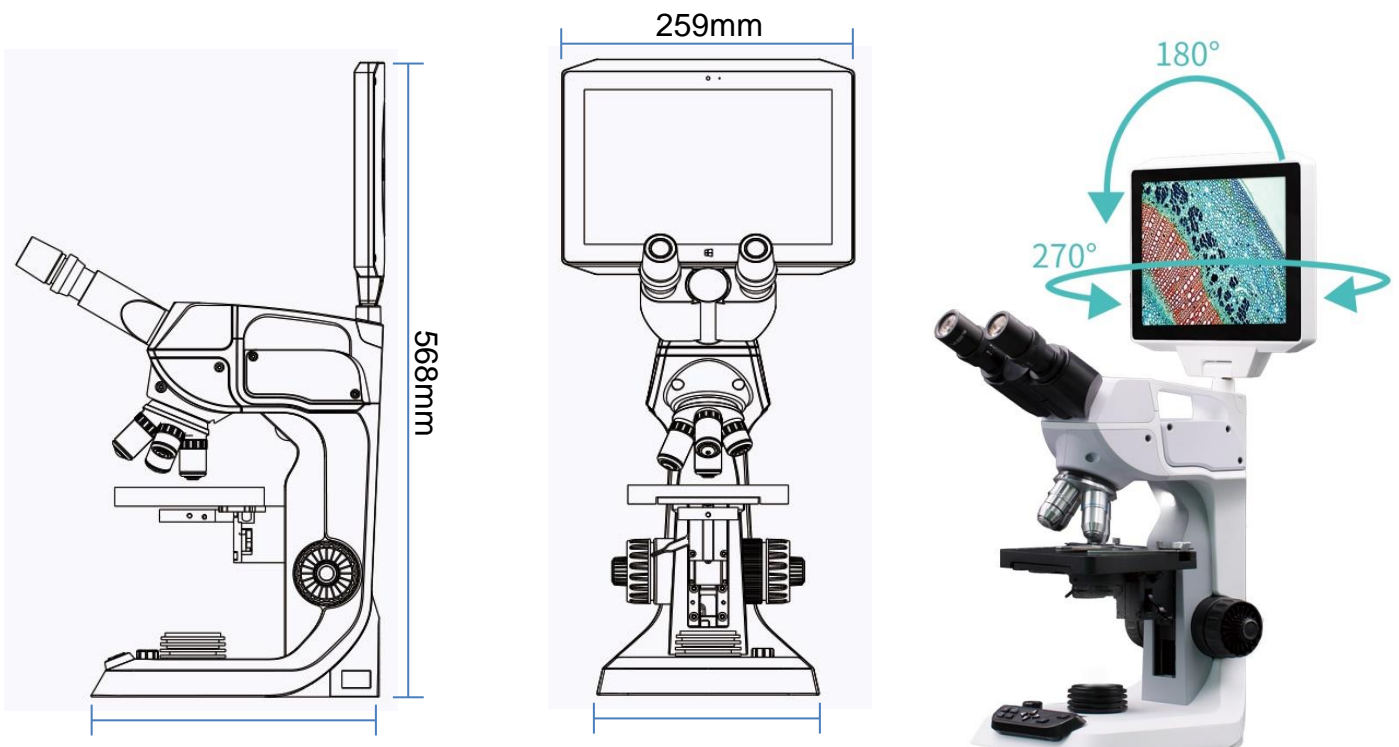
# A33.3713

## 10.1" LCD Digital Biological Microscope, Internet Version

**OPTO-EDU**



10.1" LCD Screen Full HD 1080p Display 5.0M,8.0M,16M Digital Camera Built-in  
Built-in 8G Memory For Picture & Video Capture, Output To USB And WIFI  
With Ethernet Connection Port & Interactive Software For Teaching  
Biological & Stereo 1x Lens Low Power Combined In One  
Up & Bottom LED Light Source For All Specimen View





# Product Specification

A33.3713 Series Of High-definition Digital Liquid Crystal Microscopes Can Meet The Needs Of Biological Specimen Sectioning In The Teaching Field. An Eye-catching Handle Is Provided Above The Fuselage, Which Can Ensure That The Microscope Is Always Kept In A Positive Position When Lifting And Moving The Microscope, Thereby Effectively Preventing The Eyepieces And Observation Samples From Falling. In Addition, The Instrument Can Be Equipped With A High-capacity Lithium Battery (optional) And Can Be Used Without A Power Supply, Which Is Very Convenient For Outdoor Viewing.

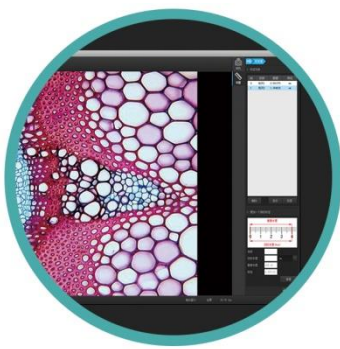
A33.3713 Digital Biological Microscope Specification		5.0M	8.0M	16M
LCD Screen	10.1", Resolution 1920x1200	●	●	●
External Interface	Ethernet	●	●	●
	WIFI		●	●
	USB Camera			●
Support External Devices	Desktop/Laptop/Integrated Machine	●	●	●
Storage	Built-in 8G/Inserted U disk	●	●	●
Video Resolution	1080P/30fps	●	●	●
Photo Resolution	5.0 M	●		
	8.0 M		●	
	16 M			●
Measuring	Crosshair	●	●	●
Positioning	Crosshair, Arrow Pointer Coordinate Colors Are Black, White, Red, Blue, Green Positioning Reference Can Be Stored	●	●	●
Feature	Biological & Stereo	●	●	●
Magnification	40x-400x	●		
	10x-400x		●	
	10x-1000x			●
	64x-640x	○		
	16x-640x		○	
	16x-1600x			○
Eyepiece	WF10x/18mm	●●	●●	●●
	WF16x/13mm	○○	○○	○○
Nosepiece	Triple	●		
	Quadruple		●	
	Quintuple			●
Biological Objective	Infinity Plan Objective 4x/ 10x/ 40x	●	●	
	Infinity Plan Objective 4x/ 10x/ 40x/ 100x			●
Stereo Objective	Infinity Objective 1x		●	●
Focusing	Coaxial Coarse & Fine Focus	●	●	●
Working Stage	Double Layers Mechanical Stage 140x130/76x36mm	●	●	●
Condenser	Abbe	●	●	●
Illumination	Transmit & Side LED Light Source	●	●	●
Input Voltage	19V	●	●	●
Optional Accessories	Aluminum Box	○	○	○
	Aluminum Box With Tie Rod	○	○	○
	High-capacity Lithium Battery	○	○	○

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories.

# A33.3714

## 10.1" LCD Digital Biological Microscope, Win10 Pad +Internet Version

**OPTO-EDU**



10.1" Win10 Pad 5.0M, 14M Digital Camera + HDMI + VGA Output  
Windows Pad Win10 System Built-in 4G/8G Memory SSD 64G/128G  
With Ethernet Connection Port & Interactive Software For Teaching  
Biological & Stereo 1x Lens Low Power Combined In One  
Up & Bottom LED Light Source For All Specimen View

Each Intelligent Digital Microscope Provides Multiple USB Interfaces, Which Can Be Connected To Multiple Sensors At The Same Time To Ensure The Digital Experiment Of The Sensor.



# Product Specification

A33.3714 Series High-definition Digital Lcd Microscope Can Meet The Needs Of Biological Specimen Sectioning And Solid Observation In The Teaching Field. It Is An Intelligent Digital Microscope With Integrated Computer. The All-metal Fuselage Is Integrally Molded. The Fuselage Comes With A 10.1 "high-definition Display With A Resolution Of 1920x1200 And Real-time Display Of Ultra-high-definition Images, Which Meets The Needs Of Simultaneous Observation By Multiple People. An Eye-catching Handle Is Provided Above The Fuselage, Which Can Ensure That The Microscope Is Always Kept In A Positive Position When Lifting And Moving The Microscope, Thereby Effectively Preventing The Eyepieces And Observation Samples From Falling.

A33.3714 Digital Biological Microscope Specification		5.0M	14M
LCD Screen	10.1", 1920x1200	●	●
Video Resolution	1080P/30fps	●	●
Photo Resolution	5.0 M	●	
	14 M		●
High Speed digital camera	UBS 3.0		
External Interface	Projector/Monitor	●	●
Storage	Computer Memory	●	●
Photo/Video Playback	Yes		
Data Output	HDMI, VGA, USB 3.0	●	●
OS	Windows 7/10	●	●
Solid State Disk	64G	●	
Internal Storage	128G		●
	4G	●	
CPU	8G		●
	Intel Core i3	●	
	Intel Core i5		●
Feature	Biological & Stereo	●	●
Magnification	10x-400x	●	
	10x-1000x		●
	16x-640x	○	
	16x-1600x		○
Eyepiece	WF10x/18mm	●●	●●
	WF16x/13mm	○○	○○
Nosepiece	Quadruple	●	
	Quintuple		●
Biological Objective	Infinity Plan Objective 4x/ 10x/ 40x	●	
	Infinity Plan Objective 4x/ 10x/ 40x/ 100x		●
Stereo Objective	Infinity Objective 1x	●	●
Focusing	Coaxial Coarse & Fine Focus	●	●
Working Stage	Double Layers Mechanical Stage Stage 140x130/76x36mm	●	●
Condenser	Abbe	●	●
Illumination	Transmit & Side LED Light Source	●	●
Input Voltage	19V	●	●
Optional Accessories	Aluminum Box	○	○
	Aluminum Box With Tie Rod	○	○

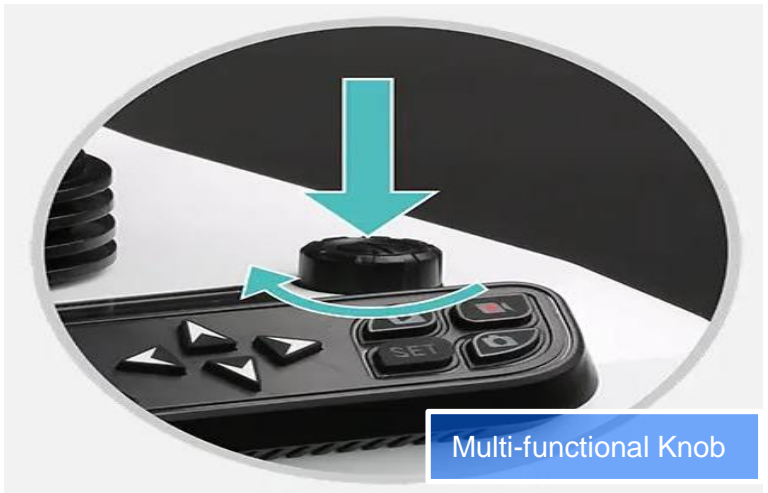
Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories.



# A33.3733

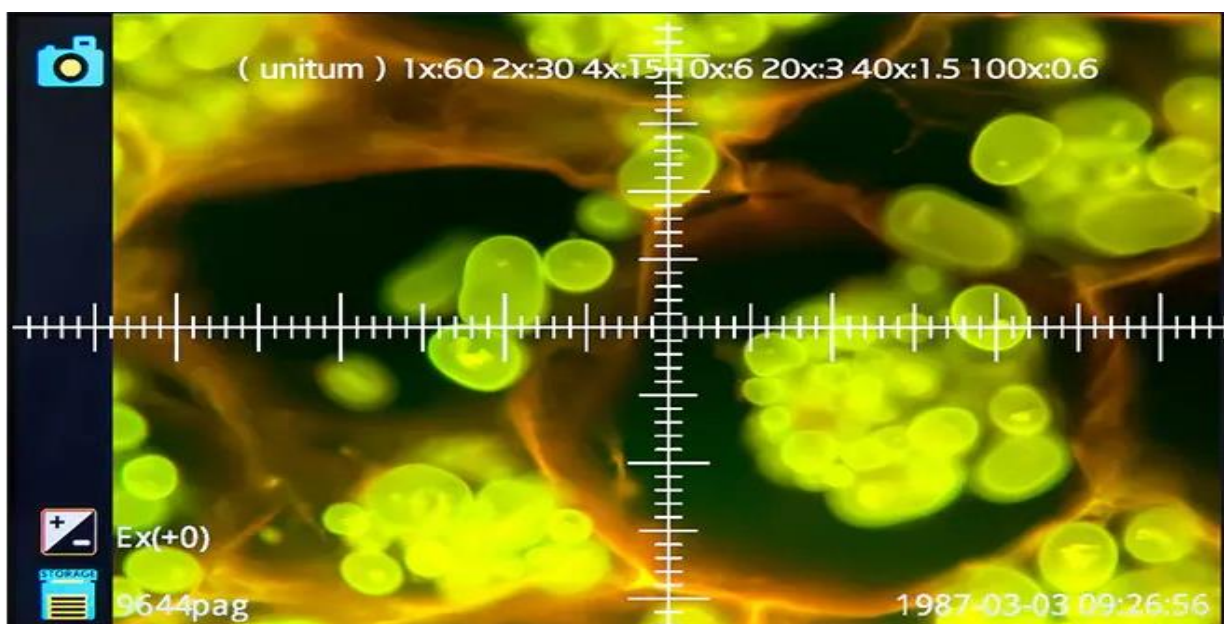
## 10.1" LCD Digital Fluorescent Microscope, Ethernet Version

**OPTO-EDU**



Multi-functional Knob

10.1" LCD Screen Full HD 1080p Display 5.0M,8.0M,16M Digital Camera Built-in  
Built-in 8G Memory For Picture & Video Capture, Output To USB And WIFI  
With Ethernet Connection Port & Interactive Software For Teaching  
Fluorescent + Biological Infinity Plan 4x10x40x100x + Stereo 1x Lens Low Power Combined In One  
Up & Bottom LED Light Source For All Specimen View

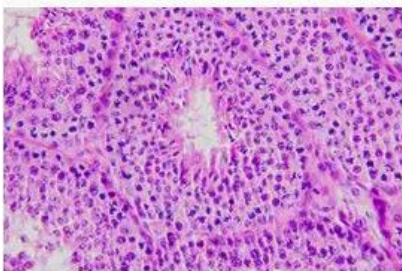


The instrument has a built-in HD digital image module with an effective pixel of 5 million and supports HD video 1080p/30fps. The free professional observation software also supports scale calibration and can measure observation samples quickly and accurately which makes your observations more reliable.

# Product Specification

A33.3733 Digital Fluorescent Microscope Specification		5.0M	8.0M	16M
LCD Screen	10.1", Resolution 1920x1200	●	●	●
External Interface	Ethernet	●	●	●
	WIFI		●	●
	USB Camera			●
Support External Devices	Desktop/Laptop/Integrated Machine	●	●	●
Storage	Built-in 8G/Inserted U disk	●	●	●
Video Resolution	1080P/30fps	●	●	●
Photo Resolution	5.0M	●		
	8.0M		●	
	16M			●
Measuring	Crosshair	●	●	●
Positioning	Crosshair, Arrow Pointer Coordinate Colors Are Black, White, Red, Blue, Green Positioning Reference Can Be Stored	●	●	●
Feature	Biological & Stereo	●	●	●
Magnification	40x-400x	●		
	10x-400x		●	
	10x-1000x			●
	64x-640x	○		
	16x-640x		○	
	16x-1600x			○
Nosepiece	Triple	●		
	Quadruple		●	
	Quintuple			●
Biological Objective	Infinity Plan Objective 4x/ 10x/ 40x	●	●	
	Infinity Plan Objective 4x/ 10x/ 40x/ 100x			●
Stereo Objective	Infinity Plan Objective 1x		○	○
Focusing	Coaxial Coarse & Fine Focus	●	●	●
Working Stage	Double Layers Mechanical Stage, 140x130/76x36mm	●	●	●
Condenser	Abbe	●	●	●
Illumination	Transmit & Side LED Light & Coaxial Light	●	●	●
Input Voltage	19V	●	●	●
Fluorscent Filter (Choose 1 From 3 Bands)	B Exciton Wavelength: 460~490nm G Exciton Wavelength: 510~550nm U Exciton Wavelength: 365~420nm	●	●	●
Optional Accessories	Aluminum Box	○	○	○
	Aluminum Box With Tie Rod	○	○	○
	High-capacity Lithium Battery	○	○	○

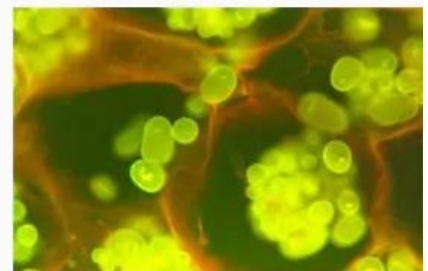
Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories.



Biological observation



Stereo observation



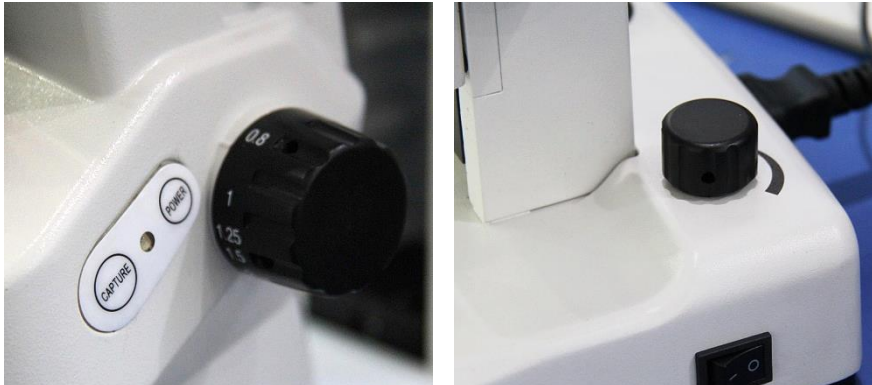
Fluorescent



# A32.0902

Digital Stereo Microscope, 0.8x~3.5x, 5.0M

**OPTO-EDU**



Two focusing knobs are tension adjustable,

0.8x~3.5x Zoom Objective, Zoom Ratio 1:4.4

Binocular Head Build-in Integrated 5.0 Mega Pixels COMS Camera

Data Output HDMI port, Analog Video Port(RCA), USB2.0 Port, SD Card 2G.

Top & Bottom Illumination Single 5W LED Brightness Adjustable

Working Distance 95mm With Coarse Focusing Knob

## Product Specification

### A32.0902 Digital Zoom Stereo Microscope

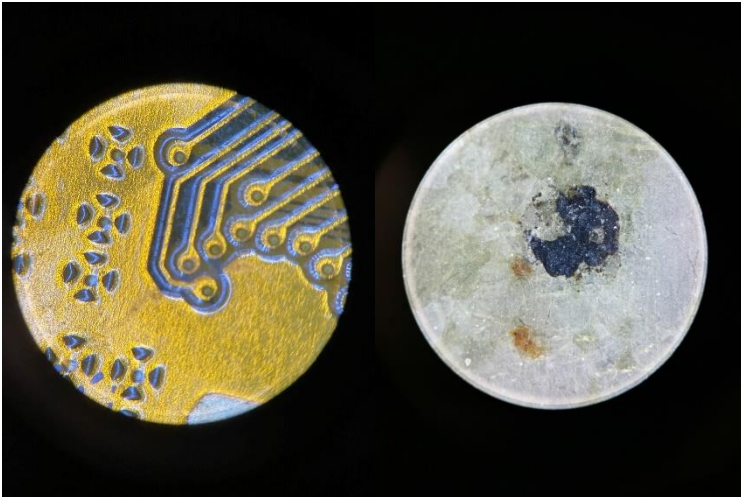
Magnification	8x~35x
Head	Binocular, 60° Inclined, Built-in 5.0M CMOS Digital Camera, Interpupillary Range 50~75mm
Eyepiece	Wide Filed, High Eyepoint WF10x/22mm, Diopter Adjustment $\pm 5$
Objective	0.8x~3.5x Zoom Objective, Zoom Ratio 1:4.4
Working Distance	95mm.
Focus	Two focusing knobs are tension adjustable, adjustment range 95mm
Illumination	Top Illumination: Single 5W high power LED, independent switch, brightness adjustable, angle adjustable
	Bottom Illumination: Single 5W high power LED, independent switch, brightness adjustable
Photo System	Build-in Integrated 5.0 Mega Pixels COMS Camera, Membrane Switch and SD Card Slot
Image Output	HDMI port, Analog Video Port(RCA), USB2.0 Port, SD Card 2G.



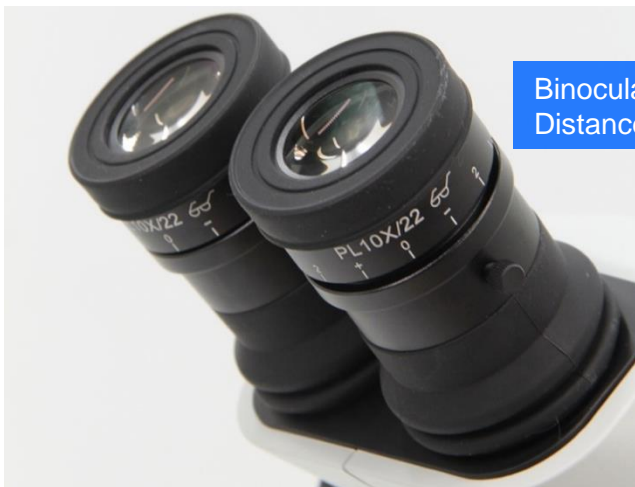
# A32.0908

## WIFI Digital Zoom Stereo Microscope, 0.67~4.5x, Android

**OPTO-EDU**



5.0M WIFI Camera Built-in, WIFI Support 6 Devices  
0.67x-4.5x Zoom Magnification Zoom Ratio 1:6.7  
Zoom Knob With Click Stop Switch & Magnification Lock  
45° Inclined Binocular & Trinocular Head With Working Distance 110mm  
Pole & Track Stand With Transmit & Reflect LED Light Source



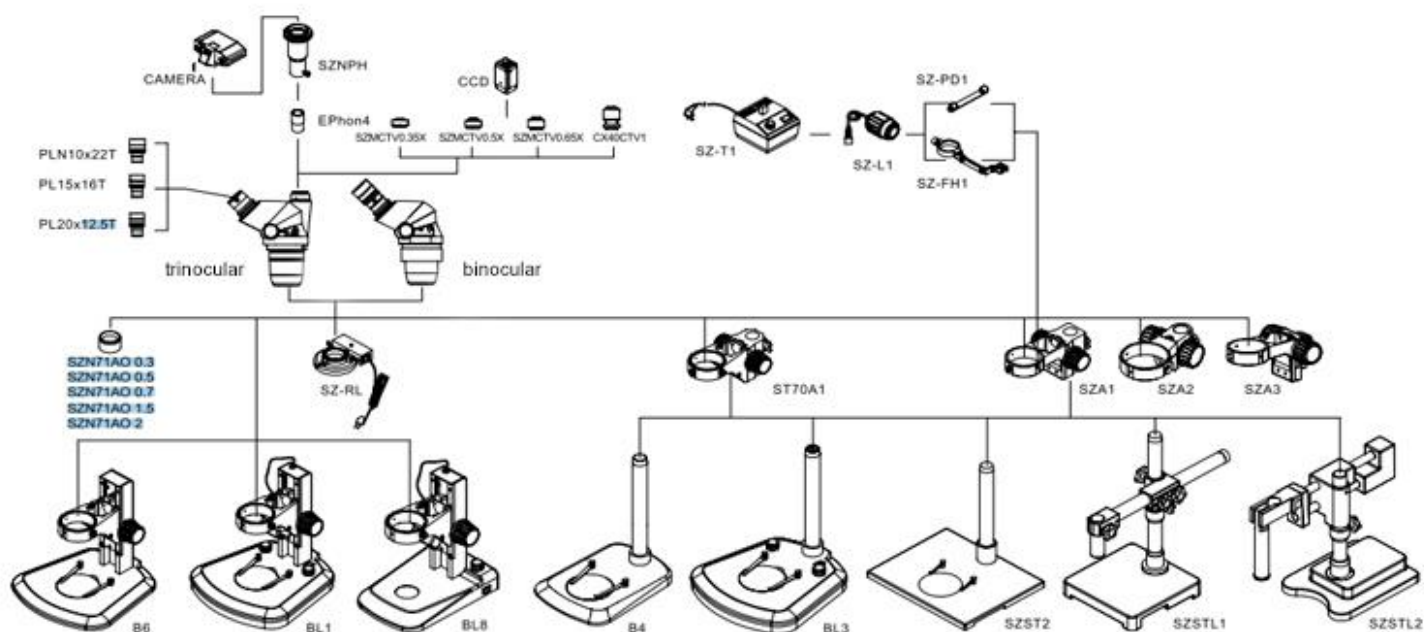
Binocular Head, 45° Inclined, Inter-pupillary Distance 52-76mm, With Eyepiece Lock Screw



0.67-4.5x, W.D.=110mm, With Click Stop & Magnification Lock On Zoom Knob

# Product Specification

A32.0908 Serie Zoom Stereo Microscope		-BL11	Cata.No.
Head	5.0M Built-in WIFI Digital Camera, Support Android System, Max Support 6 Devices At Same Time Binocular Head, 45° Inclined, Inter-pupillary Distance 52-76mm	●	
Eyepiece	High-Eyepoint Wide Field Plan Eyepiece PL10x/22mm, Diopter Adjustable	●●	A59.0955-1022
	High-Eyepoint Wide Field Plan Eyepiece PL15x/16mm, Diopter Adjustable	○	A51.0955-1516
	High-Eyepoint Wide Field Plan Eyepiece PL20x/12mm, Diopter Adjustable	○	A51.0955-2012
Lens	0.67-4.5x, W.D.=110mm, With Click Stop & Magnification Lock On Zoom Knob	●	
Auxiliary Objective	0.3X/WD287mm	○	A52.0908-03
	0.4X/WD217mm	○	A52.0908-04
	0.5X/WD177mm	○	A52.0908-05
	0.75X/WD120mm	○	A52.0908-75
	1.5X/WD47mm	○	A52.0908-15
	2X/WD26mm	○	A52.0908-20
Focus	Bracket ST70A1 With Coarse Focusing Knob, Focus Range 50mm	●	
Base	BL Pillar Stand, Fan Base, With Up/Bottom LED Light Source, Brightness Adjustable	●	A54.0961-BL11
Packing	Inner Foam + Strong Carton Box	●	



# A32.0920

## Digital Stereo Microscope

**OPTO-EDU**



Stereo Microscope Zoom Lens 0.7x~5x Zoom Ratio 1:7  
 Built-in Camera With HDR Image, OSD Manual, 1/3" COMS, 4.0M Pixel, 16G Memory  
 Output HDMI/USB2.0/Mini USB; Support SD Card/Wireless Keyboard & Mouse  
 0.5x/1.0x/1.4x Main Objective Working Distance 105mm~170mm  
 Built-in LED Ring Lamp With Three Circles, Intensity Separately Adjustable

### Product Specification

#### A32.0920 Digital Stereo Microscope Specification

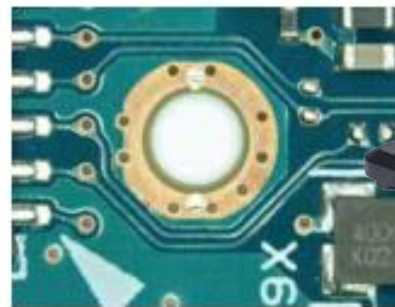
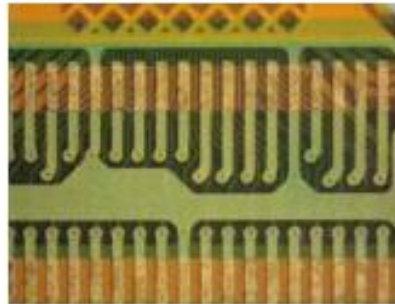
Body	Zoom Lens 0.7x~5x; Built-in Camera With HDR Image, OSD Manual, 1/3" COMS, 4.0M Pixel, 16G Memory; Output HDMI/USB2.0/Mini USB; Support SD Card/Wireless Keyboard & Mouse
Main objective	1.0x Main Objective, WD=105mm
	1.4x Main Objective, WD=100mm
	0.5x Main Objective, WD=170mm
Illumination	LED Ring Lamp 56 Bulbs, Intensity Adjustable, Color Temperature 5000-5500K
	LED Ring Lamp With Two Circles, Intensity Separately Adjustable, Color Temperature 5000-5500K
Base	Big Plain Stand, Lifting Range 225mm
Accessories	1.5m USB Cable; 5m HDMI Cable



# A36.0920

## LCD Digital Stereo Microscope, 10.6"

**OPTO-EDU**



IPS10" Touch Screen LCD Monitor, -5°~15° Inclination Adjustable

Stereo Microscope Zoom Lens 0.7x~5x Zoom Ratio 1:7

Built-in Camera With HDR Image, OSD Manual, 1/3" COMS, 4.0M Pixel, 16G Memory

Output HDMI/USB2.0/Mini USB; Support SD Card/Wireless Keyboard & Mouse

0.5x/1.0x/1.4x Main Objective Working Distance 105mm~170mm

## Product Specification

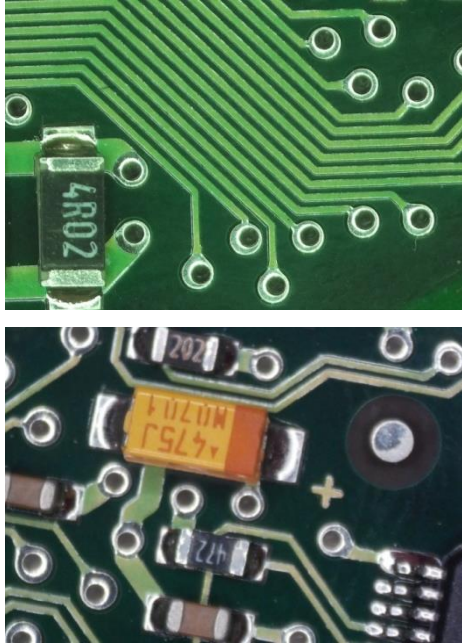
### A36.0920 LCD Digital Stereo Microscope Specification

LCD	IPS10" Touch Screen LCD Monitor, -5°~15° Inclination Adjustable
Body	Zoom Lens 0.7x~5x; Built-in Camera With HDR Image, OSD Manual, 1/3" COMS, 4.0M Pixel, 16G Memory; Output HDMI/USB2.0/Mini USB; Support SD Card/Wireless Keyboard & Mouse
Main Objective	1.0x Main Objective, WD=105mm 1.4x Main Objective, WD=100mm 0.5x Main Objective, WD=170mm
Illumination	LED Ring Lamp 56 Bulbs, Intensity Adjustable, Color Temperature 5000-5500K LED Ring Lamp With Two Circles, Intensity Separately Adjustable, Color Temperature 5000-5500K
Base	Big Plain Stand, Lifting Range 225mm
Accessories	1.5m USB Cable; 5m HDMI Cable

# A32.1201

Digital Stereo Microscope, 2x/4x, 1.3M

**OPTO-EDU**



1.3M USB2.0 Digital Camera Built-in Binocular Head  
Total Magnification 20x/40x With 2x/4x Lens And WF10x/20 Eyepiece  
Track Stand With Coarse Focusing Knob  
Incident & Transmit 12V/10W Halogen Lamp Brightness Adjustable  
With Software For Measuring Support Win 7, Win10

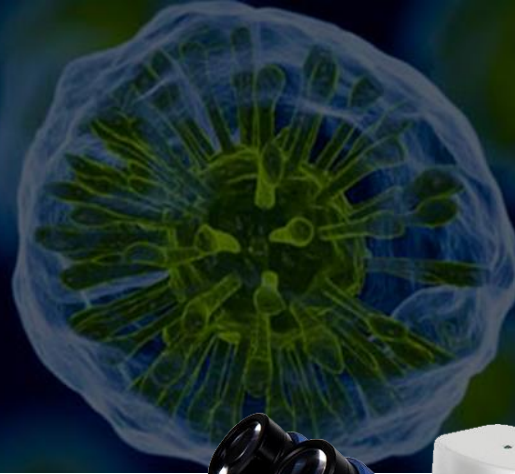
## Product Specification

Items	A32.1201 Digital Stereo Microscope	
Head	Inclined Binocular Head,360° Rotatable, Built-in CMOS(1.3M Pixel)	
Eyepiece	WF10X /Φ20	
Objective	2x/4x	
Focusing	Coarse Focusing Adjustment	
Incident Light	Halogen Lamp 12V/10W,Brightness Adjustable	
Transmitted Light	Halogen Lamp 12V/10W,Brightness Adjustable	
Optional Accessories		Item No.
Eyepiece	WF5X/Φ16	A51.1201-05
	WF15X/Φ15	A51.1201-15
	WF20X/Φ10	A51.1201-10

# A32.1239

## Digital Stereo Microscope, 1.3M

**OPTO-EDU**



1.3M/3.0M USB2.0 Digital Camera Built-in Binocular Head  
Total Magnification 10x/20x/40x With 1x/2x/4x Lens And WF10x/20 Eyepiece  
Track Stand With Coarse Focusing Knob & Handle For Easy Carrying  
Separate Power Switch For Up/Bottom Light Source  
Up 1W LED, Bottom 7x20mA LED Light Source, Brightness Adjustable

### Product Specification

A32.1239 Digital Stereo Microscope		1.3M	3.0M
Camera	1.3M Pixels, 1024x768 3.0M Pixels, 2048x1536	•	•
Data Interface	USB2.0		
Head	Binocular Head, 45° Inclined, Diopter Adjustment $\pm 5$ , Interpupillary Distance 48~75mm		
Eyepiece	WF10x/20mm		
Objective	1x,2x,4x Standard, 1x,2x,3x Optional		
Focusing	Coarse Focusing, Range 40mm		
Working Distance	57mm		
Stand	Track Stand + Touch Switch With Dia 70mm Glass Stage And White/Black Stage		
Light Source	Top 1W LED, Bottom 7x20mA LED Light Brightness Adjustable		
Power	AC 100~240V Wide Range Power, With 3xAA Rechargeable Batteries Built-in Base. (For Order Shipped By Air, The Batteries Will Not Be Included)		
Optional Accessories			
Eyepiece	WF5x/18mm	E51.1221-5	
	WF10x/20mm	E51.1221-10	
	WF15x/15mm	E51.1221-15	
	WF20x/10mm	E51.1221-20	



# A32.6401

Digital Stereo Microscope, 0.7x~4.5x, 12M

**OPTO-EDU**



0.7x~4.5x Zoom Lens 14x-90x Total Magnification On 10.6" LCD  
Full HD 12.0M Image And 1080p/30fps Video  
Upper + Side LED Light Brightness Adjustable  
SD Card Slot And HDMI Output To Monitor Available  
Black Pole Stand 38\*25cm



Auto Exposure,  
Exposure Offset  
Auto White Balance  
Photo, Video Recording

# Product Specification



**A32.6401-12M**



**A36.6401-12M**



**A32.6401-12MH**

A32.6401, A36.6401 Series Digital Microscope			A32.6401 -12M	A36.6401 -12M	A36.6401 -12MH
LCD Screen	Size	10.6" IPS LCD		●	●
	Resolution	1366*768		●	●
Digital Camera	Camera Pixel	12MP	●	●	●
	Video Resolution	1080p/60fps	●	●	●
	Data Output	HDMI	●		●
	WDR	Yes	●	●	●
	Function	Auto Exposure, Exposure Offset Auto White Balance Photo, Video Recording	●	●	●
	Storage	SD Card Storage (Max 32G)	●	●	●
	External Interface	Projector/Monitor With HDMI Port	●		●
Optical	Objective	0.7x~4.5x Zoom Lens	●	●	●
	Total Magnification	14x~90x On 10.6" LCD Screen	●	●	●
	Illumination	Side/Up LED Light, Brightness Adjustable	●	●	●
	Focus Range	60mm	●	●	●
	Working Distance	88mm	●	●	●
Stand	Column	Round Pole, Dia.25mm	●	●	●
	Stand	380mm*250mm*20mm, Black 320mm*260mm*20mm, White (Same Cost)	● o	● o	● o
Optional	A52.6401-0.5	Auxilliary Lens 0.5x	o	o	o
	A52.6401-2.0	Auxilliary Lens 2.0x	o	o	o
	Boot Logo		o	o	o
	WiFi SD Card, Upgrade To WiFi Microscope		o	o	o
	SD Card		o	o	o
Power	DC 12V1A, Wide Range 100~240V AC Adapter		●	●	●
Remark: "●" Means Standard Outfit, "o" Means Optional					

# A32.3645

## Digital Stereo Microscope, 0.7x~4.5x, 3.0M

**OPTO-EDU**



3.0M Built-in Digital Camera USB2.0 Output

Optical Magnification 7x-45x, Up To 3.5x-270x With Optional Eyepieces & Auxiliary Objectives

High Eyepoint, Dia.30mm WF10x/20mm, WF15x, WF20x, WF25x Optional

Working Distance 100mm, Up To 30~165mm With Auxiliary Objectives

35 Kinds Stand Optional, Details See A54.3630

## Product Details

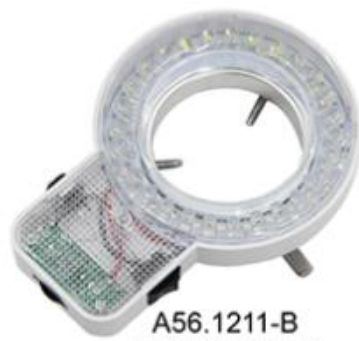


WF10x/20mm, High Eyepoint, Dia.30mm





A56.2103-A  
LED Ring Light, 56 LEDs



A56.1211-B  
LED Ring Light



0.7x-4.5x, Magnification Up To 3.5x-180x With Optional Eyepieces And Auxiliary Objectives

### A32.3645 Series Digital Zoom Stereo Microscope Specification

Head	Trinocular Head, 45° Inclined, 360° Rotatable, Interpupillary Adjustment 54-75mm, Both Eyepiece Tube ±5° Diopter Adjustable, With Eyepiece Adapter Focus Adjustable, Light Split Fixed P50:E50, <b>Simul Focal Design</b> To Show Image On Both Eyepiece & Photo Port At Same Time
Eyepiece	WF10x/20mm, High Eyepoint, Dia.30mm
Zoom Lens	0.7x~4.5x
Zoom Ratio	1:6.5
Optical Magnification	7x-45x, Up To 3.5x-270x With Optional Eyepieces & Auxiliary Objectives
Working Distance	100mm, Up To 30~165mm With Auxiliary Objectives
Field Of View	0.9-57.1mm (Detail See Optical Data Sheet)
Focusing	Pole Stand Coarse Focusing Range 50mm, Tension Adjustable Track Stand Coarse Focusing Range 74mm, Tension Adjustable
Stand	35 Kinds Stand Optional, Details See <b>A54.3630</b> Choose Model According To Cata. No. Like: <b>A32.3645-B1</b> Means Binocular Head With B1 Stand

### Digital Camera Specification

Camera Sensor	3.0Mpixel 1/2"COMS; 1.3M,5.0M Optional
Resolution	2048*1536
Pixel Size	3.18um*3.18um
Transmission Rate	7 fps@2048*1536
Sensitivity	0.9v/lus-secx
Scanning Mode	Successive Scans
Operation System	Windows 2000/XP
Data Interface	USB2.0(480Mbit/sec)
Power	USB2.0

### Optional Accessories

### Cata.No.

Eyepiece	WF10x/20mm, High Eyepoint, Dia.30mm	A51.3621-1020
	WF15x/15mm, High Eyepoint, Dia.30mm	A51.3621-1515
	WF20x/10mm, High Eyepoint, Dia.30mm	A51.3621-2010
	WF25x/9mm, High Eyepoint, Dia.30mm	A51.3621-2509
	WF30x/8mm, High Eyepoint, Dia.30mm, Diopter Adjustable	A51.3622-3008
Auxiliary Lens	0.5x, W.D. 165mm	A52.3621-05
	1.5x, W.D. 45mm	A52.3621-15
	2.0x, W.D. 30mm	A52.3621-20

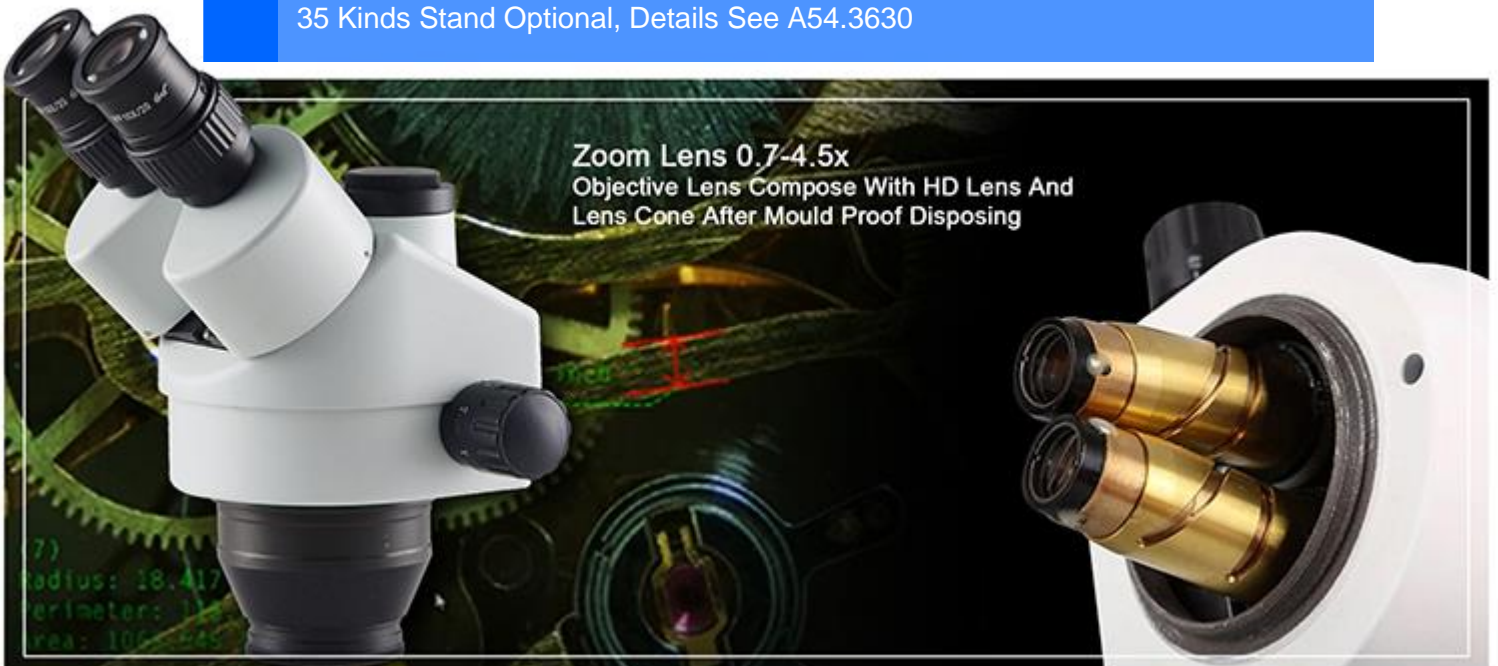
# A32.3602-STL2

Digital Stereo Microscope, HDMI+USB

OPTO-EDU



3.5M HDMI+USB Digital Camera With Manual Focus Knob  
7x-45x, Up To 3.5x-270x With Optional Eyepieces & Auxiliary Objectives  
High Eyepoint, Dia.30mm WF10x/20mm, WF15x, WF20x, WF25x Optional  
Working Distance 100mm, Up To 30~165mm With Auxiliary Objectives  
35 Kinds Stand Optional, Details See A54.3630



Zoom Lens 0.7-4.5x  
Objective Lens Compose With HD Lens And  
Lens Cone After Mould Proof Disposing



### Hardware Configuration

Image Sensor	Aptina AR0330 CMOS Sensor
Expose Mode	Rolling Shutter
Maximum Resolution	2304 x 1536 (3,538,944 Pixels)
Sensor Optical Format	1/3" (5.07mm(H) x 3.38mm(V), Diagonal 6.09mm)
Pixel Size	2.2μm x 2.2μm
Dynamic Range	69.5dB
SNR (Signal Noise Ratio)	39dB
Spectral Characteristics	380 ~ 650nm
Exposure Capability	Real-time Auto, Single Auto, Manual Adjustment
White Balance	Real-time Auto, Single Auto, Manual Adjust R G B Seperately
Display(preview) Resolution	HDMI:1920X1080i60, 1920X1080P30,1280x720P60,640x480P60(Auto Fit-to-fill Displayer) USB:1920X1080@30FPS,1280x720@30FPS(Optional To Display)
Record Format	Snapshot Picture Format: JPG Resolution: HDMI: 2304 x 1536, 2304 x 1296, 1920x1080, 1280x720, 800x480 USB: 1920x1080, 1280x720, 800x480 Record Video Format: MOV Resolution: HDMI: 1280x720@30FPS, 800x480@30FPS USB: 1920x1080@30FPS, 1280x720@30FPS, 800x480@30FPS
Record Route	HDMI: TF Card(Maximum Support 64G) USB: PC

### Software Environment

Power Supply	HDMI: Direct Current, Power Plug, (Maximum Current 1A) USB: USB Port Of PC Or Laptop (No Need Other Power Supply)
Displayer	Recommend 16:9 , At Least 1080P HD Displayer

### Operating Environment

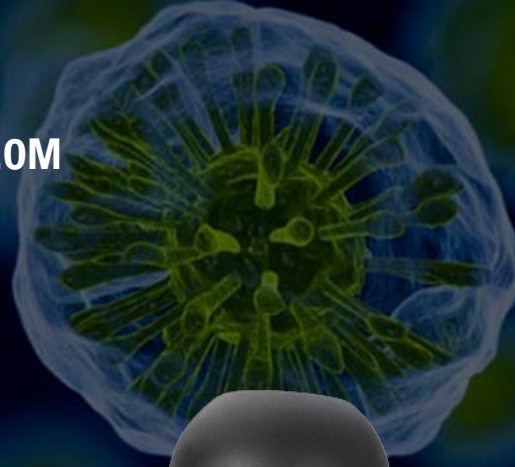
Operating Temperature	0°C ~ 40°C
Storage Temperature	-20°C ~ 60°C
Operating Humidity	30 ~ 60%RH
Storage Humidity	10 ~ 80%RH



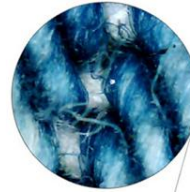
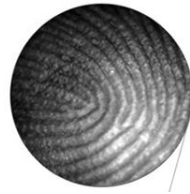
# A34.5001

USB Digital Microscope, 300x, 5.0M

**OPTO-EDU**



Total Magnification 20x-300x  
5.0M High Resolution CMOS Digital Camera  
8 LEDs Ring Light Built-in Brightness Adjustable  
Universal Angle Adjustable Stand For Easy View  
With Software MicroCapture For Measurement



## A34.5001 USB Digital Microscope

Image Sensor	5 Mega Pixels (True Resolution)
Still Capture Resolution	2592x1944, 2048x1536, 1920x1080, 1280x1024
Video Capture Resolution	1920x1080, 1280x1024
Focus Range	Manual Focus From 10mm To 50mm
Frame Rate	Max 30f/s Under 600 Lus Brightness
Magnification Ratio	20x To200x And 300x
Video Format	AVI
Photo Format	JPEG Or BMP
Light Source	8 LED (Adjustable By Control Wheel)
PC Interface:	USB2.0
Operation System	Windows XP/Vista/Win7 Mac OS X 10.6 Or Above
OSD Language	English, German, Spanish, French, Russian
Bundle Software	MicroCapture With Measurement
Product Size	110mm (L) x 33mm (R)
Weight	90g
Warranty	1 year

# A34.5002

USB Digital Microscope, 300x.0M, 5WIFI+USB Miroscope, 200x, 3.0M, iPad/Android/Win

**OPTO-EDU**



Total Magnification 10x-200x  
3.0M WIFI +USB Miroscope For iPad/Android/Win  
USB 2.0, TF Card Slot To Save Photo Video  
6 LEDs Ring Light Built-in Brightness Adjustable  
Pole Stand With Holder Height Adjustable Focusing



3.0M, 1080p, 10~200x, 6 LED, USB 2.0, TF Card Slot, With Stand, iPhone/iPad/Pc/Android

# Product Specification

## A34.5002-3.0M WIFI Miroscope, iPhone/iPad/Pc/Android, 10X-200X

Resolution	3.0M, True Resolution
Senser	1/4" CMOS, Color
Magnification	10x~200x
Video Resolution	1280x720 (720P), 640x480 (VGA)
Video Format	H.264
Frame Rate	Wireless
	1080P: 15fps,
	VGA: 25fps
Storage	TF Card Slot
Photo Resolution	1280x720 (720P), 640x480 (VGA)
Photo Format	JPG
Focus Range	0~40mm, Manual Focus
Snapshot	By Software
PC Interface	USB2.0
IOS/Android Interface	WIFI Direct
Transmission Range	20M, Open Sight
Transmission Rate	150Mbps
Power Supply	DC5V, 1A, By Mini USB
Battery	Rechargeable Battery, Lithium 1300mAh, Can Be Charged By Adaptor/USB
Battery Working Time	Around 75 Minutes
Operation Temperature	0~65°
Light Source	6 LEDs, Brightness Adjustable
Power Source	Rechargeable Li-ion Battery
	Working Time: 90mins, Charging Time: 100mins
	Charging Power: 5V DC
Operation System	IOS (5.1 Or Later)
	Android
	Windows XP/Win7/Win8
	Mac Book (10.7 Or Later)
App	IOS: Wifi Capture, Search And Download From App Store
OSD Language	English, Deutsch, Spanish, Russian, Italian, French, Portuguese, Dutch, Polish, Japanese, Korean, Chinese
Bundle Software For PC	Portable CaptureHD (With Measurement)
Measurement	Yes, For Windows And Mac Book
Accessories	Professional Stand, Adapter, USB Cable, Softare CD, Calibration Charge
Dimension	Microscope: 154mm (L) x 44mm (R)
	Professional Stand: 165mm(L) x118mm(W)x12mm (H)
Weight	130g
Packaging	Gift Box, 6pcs/carton 9.0kgs/carton, 44x42x35cm



# A34.5017

WIFI Digital Miroscope, 200x, 2.0M, iPad/Android

**OPTO-EDU**



Total Magnification 10x-200x  
2.0M WIFI Miroscope For iPad/Android  
With Tiny Capture App , With Rechargeable Battery  
6 LEDs Ring Light Built-in Brightness Adjustable  
Pole Stand With Holder Focusing Range 50mm

## A34.5017 WIFI Digital Miroscope, 200x, 2.0M, iPad/Android

Description	Internet Wi-Fi Digital Microscope
Magnification Ratio	10x - 200x
Still capture resolution	1920x1080,640x480,320x240
Video capture resolution	1920x1080,640x480,320x240
Focus Range	Manual focus from 0mm to 50mm
Video format	AVI
Photo format	JPEG
Light source	6 LED (adjustable by control wheel)
Power source	Rechargeable Li-ion battery Working time: 100mins Charging power: 5V DC
IOS/Android interface	Wi-Fi
App	IOS: Tiny Capture Search and download from App Store Android: Tiny Capture
Size	Microscope: 154mm (L) x 44mm (R)
Lead time	7-55 days
Term	FOB Beijing
Package contents	Microscope Adaptor/USB cable Stand User Manual
Packaging info	Gift box, 6pcs/carton 9.0kgs/carton 43.5x41.5x35cm
Valid Date	90 days

# A36.1502

## 9 LCD Digital Stereo Microscope, 5.0M

**OPTO-EDU**



**Upper 56 LEDs Right Light  
Brightness Adjustable**



5.0 M, 9" LCD, 1/2.8" CMOS, LCD Viewing Angel Free Adjustable  
USB2.0 Real Time Image Output, TF Card, USB Mouse Control Menu For Measure  
Specially Optimized LCD Digital Stereo Microscope  
0.7~4.5x Zoom Stereo Microscope With Pole Stand  
Up LED Right Light Source Brightness Adjustable

### HDMI Mouse Menu

The screenshot shows the microscope's software interface. On the left, a vertical toolbar contains icons for Take Photo, Record Video, Preview, Measure, and Setting. On the right, a '测量' (Measurement) panel displays a grid of measurement tools and a data table. At the bottom, a horizontal toolbar contains icons for Zoom In, Zoom Out, Left/Right Mirror, Up/Down Mirror, Black/White, HDR, Freeze, Font, and 4 Split. Red arrows point from these labels to the corresponding icons in the interface.

属性	名称	长度	像素	比例
选项	画线标定	200mm:200px	200	1.000000
	画圆标定			

# Product Specification

## A36.1502 9 LCD Digital Stereo Microscope, 5.0M

Head	Trinocular Head, Both Eye Tube Diopter Adjustable Light Split Switch E100:P0/E0:P100 With Eyepiece Adapter + 1.0x C-Mount	
Eyepiece	WF10x/20mm, Both With Eye-cup	
Zoom Lens	0.7~4.5x	
Zoom Ratio	1:6.5	
Magnification	7x-45x, Up To 3.5x-180x With Optional Eyepieces And Auxiliary Lens	
W.D.	Working Distance 100mm, With Standard 1.0x Lens	
F.O.V	Field Of View 1~95.2mm	
Light Source	Upper 56 LEDs Right Light Brightness Adjustable	A56.2103-A
Stand	B1 Pole Stand, Size 220*255mm, Pole Height 240mm, Dia.32mm	



### Optional Accessories

		Cata.No.
Eyepiece	WF15x/15mm, High-eyepoint	A51.1520-15
	WF20x/10mm, High-eyepoint	A51.1520-20
Auxiliary Lens	0.5x, W.D. 177mm	A52.1520-05
	0.75x, W.D. 120mm	A52.1520-75
	2.0x, W.D. 30mm	A52.1520-20
Light Source	Upper 56 LEDs Right Light Brightness Adjustable	A56.2103-A
Digital Camera	HDMI+USB+TF Digital Camera, 38.0M, USB Measure	A59.4231
	7" LCD Digital Camera, AV Output	A59.5107
	9" LCD Digital Camera, AV Output	A59.5109
CCD Adapter	Eyepiece Adapter + 0.5x C-Mount	A55.1520-05



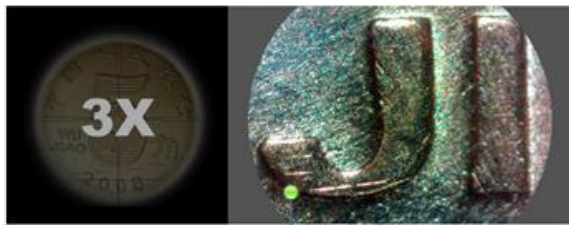
A59.3509 9" LCD Digital Camera, USB+Mouse Measure, 5.0M	
Sensor	1/2.8" Sony Star Light Level CMOS Sensor
Resolution	5.0M CMOS
LCD Screen	9" LCD, Resolution 1024x600 High Clearance Screen
Output	USB 2.0 Type-A, TF Card
Pixel Size	2.0x2.0um
Power Supply	DC 12V/2A Power Adapter, Input 100-240V AC
Function	Photo, Video, Measure, Compare
	USB 2.0 To Win 7, Win10 System, Software S-Eye Included
	Brightness, Contrast, Exposure, White Balance Adjustable
	10x Digital Zoom, 4 Split/ 2 Split Windows Image Compare
	Storage To TF Card
	Cross Line With Scale, Calibrated
	Net Line 8 Kinds, Width & Color Adjustable
Size / Weight	Product Size 225x52x175mm, Net Weight 0.7Kg
Standard Package	LCD Camera, USB 2.0 Cable, Mouse, DC12V Power Adapter
USB Mouse Measure Operation	1. Insert the mouse into the camera Type-A USB 2.0 port, connect 12V power supply to camera.
	2. Turn on the power switch, when the camera is running, the LED light turns blue
	3. Move the mouse to the top left corner of the screen to call up the MAIN MENU, including icon : Take Photo, Record Video, Preview, Measure, Setting.
	4. Move the mouse to the middle position at the bottom of the screen to call up the QUICK MENU, including icon: Zoom In, Zoom Out, Up/Dow Mirror, Left/Right Mirror, Black/White, HDR, Freeze, Net, Font, 2 Split, 4 Split
	5. Click the MEASURE icon to pop up the measure window, which support over 20 kinds of measurement graphics.
	6. Click the EDIT button and fill in the name to of new ruler to CALIBRATE. Move the mouse to the corresponding standard scale in the image display window and draw a standard length scale line. Then fill in the length column and click SAVE to complete the calibration setting. If you want to add more ruler, just repeat above steps.
	7. Click mm/PX to open or close the screen scale.
Windows Measure Operation	8. If the USB port is directly connected to the computer, the screen and the computer can be displayed synchronously (the USB cable must be connected to the computer before the device is powered on)
	9. S-EYE Measure Software: Length: Straight Line Length, Broken Line Length, Curve Length, Parallel Line Distance, Point Line Distance, Line Length Geometry: Radius Circle, Two-point Circle, Three-point Circle, Concentric Circle, Radius Circle, Two-point Circle, Three-point Circle Geometric Area: Polygon, Square Remark: Point Coordinates, Crosshairs, Coordinate Systems, Text Notes

A36.1502 Zoom Stereo Microscope Optical Data Sheet								
Objective W,D.	Standard 1.0x		Auxiliary 0.5x		Auxiliary 0.75x		Auxiliary 2.0x	
	100mm		177mm		120mm		30mm	
Eyepiece	Mag	View Field	Mag	View Field	Mag	View Field	Mag	View Field
10X/20mm	7.0X	28.6mm	3.5X	57.1mm	5.25x	43.8mm	14X	14.3mm
	45.0X	4.4mm	22.5X	8.9mm	45x	6.5mm	90X	2.2mm
15X/15mm	10.5X	21.1mm	5.25X	42.8mm	7.87x	31.8mm	21X	10.7mm
	67.5X	3.3mm	33.75X	6.7mm	50.6x	4.7mm	135X	1.7mm
20X/10mm	14.0X	14.3mm	7.0X	28.6mm	10.5x	23.9mm	28X	7.1mm
	90.0X	2.2mm	45.0X	4.4mm	67.5x	3.6mm	180X	1.1mm

# A36.1210

9" LCD Digital Measure Stereo Microscope, 46×

**OPTO-EDU**



9" HD LCD View Angle Adjustable 0° ~ 100°  
3.0M 1/3" CMOS Digital Camera Built-in  
Zoom Lens 1x~4x, Total Magnification 11.5x~460x  
Up/Bottom LED Light Source Brightness Adjustable  
USB Mouse Control + Measuring Function + SD Card Slot

## Product Specification

Items	A36.1210 LCD Stereo Microscope
LCD Screen	9" Full HD LCD, Pixel Size 2.75μm×2.75μm, Max Fps 30fps, USB2.0, SD Card, Power Switch, Can Rotate 0°-100°
Camera	1/3" 3.0M CMOS Sensor
Objective	Zoom Lens 1x-4x + Reduction Les 0.3x
Working Distance	W.D. 90.5mm
Magnification	Digital Mag. 38.1x, Total Mag. 11.5x ~ 46x. Turn Middel Wheel Of Mouse Can Digital Zoom 1x-10x
Light Source	Upper Light 21×20mA LED, Bottom Light 7×20mA LED, With Brightness Adjust Panel
Power Supply	100V ~ 240V / 12V 1A (or 2A) 、 USB2.0 Mouse
Software	Mouse Connect To LCD USB2.0, Move Mouse To Left Edge Of Screen Can See Menu

Objective Magnification	1x	1.5x	2x	3x	4x
View Of Field	18mm	12.5mm	10mm	6.5mm	4.5mm

# A36.3601

## 11.6" LCD Digital Measure Stereo Microscope, 17x-110x

**OPTO-EDU**



11.6" LCD 2.0M HD Camera All-In-One Design  
 Real-time Observation, Photo, Video, Measurement, Storage, Data Output  
 Total Magnification 17.2x-110.5x With 0.7x~4.5x Zoom Lens  
 Mouse Control Menu Support Measuring, Photo & Video Record  
 Image Output To HDMI, TF Card, USB Disk

### A36.3601 LCD Digital Stereo Microscope Specification

LCD Screen	11.6"
Objective	0.7-4.5x Zoom Objective, Zoom Ratio 6.4:1
Magnification	17x-110x
Working Distance	100mm
Camera Sensor	1/3" COMS
Resolution	1920*1080p
Transmission Rate	60FPS@2.0M
Light Source	LED Ring Light, With Switch On/Off, Brightness Adjustable.
Output	HDMI、 USB、 TF
Power	External Wide Range Adapter, Input AC 100-240V-AC50/60Hz, Output DC12V2A
Stand	Track Stand, No Light Source, Base 260x320x15mm
Features	Real-time Observation, Photo, Video, Measurement, Storage, Data Output

### A36.3601 LCD Digital Stereo Microscope Optical Data Sheet

Objective	Standard		Auxiliary 0.5X		Auxiliary 2X	
	100mm		165mm		30mm	
W,D.	Mag	View Field	Mag	View Field	Mag	View Field
11.6"	17.2x-110.5x	18.5x10.5-2.8x1.5	8.6x-55.2x	37.5x21-5.5x3.0	34.4x-221x	9.5x5.5-1.5x0.7



# A34.4970

## HDMI+USB Digital Microscope, 5.3x-39.4x, 2.0M

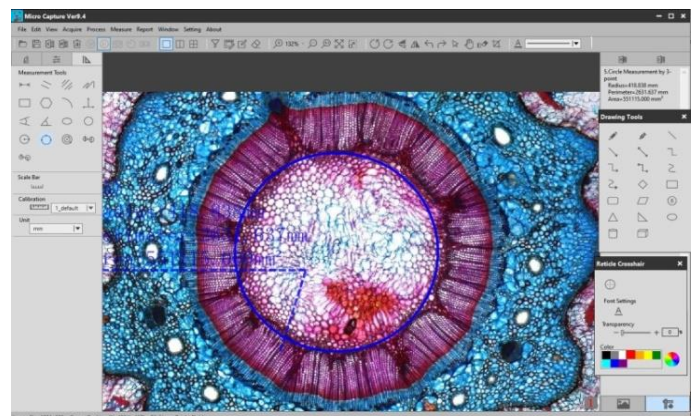
**OPTO-EDU**



Professional Multi-Function Image Processing Software Support Measure Function On Computer

Unique Design Back Focus Knob On Camera Extends Working Distance To 44~230mm  
Stainless Pole Stand With Metal Holder, Assure Vertical 180° And Move Up/Down Easily  
Comprehensive Magnification 5.3x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)

### ◆ Measurement Calibration



## Product Specification



A34.4970



A36.4970



A36.4971

A34.4970, A36.4970, A36.4971 Series HDMI+USB LCD Digital Microscope, is newly developed in 2021 for industry inspection, mobile repair and etc. work.

### A34.4970

- Professional Multi-Function Image Processing Software Support Measure Function On Computer
- Unique Design Back Focus Knob On Camera Extends Working Distance To 44 ~ 230mm.
- 360° Universal Hinge Bracket Design Supports Arbitrary Hovering, Flexible To View Any Angle
- Comprehensive Magnification 5.3x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)
- Dual LED Ring Light With Independent Control Switch Both Brightness Adjustable
- One Power Cord For All Microscope & LCD Makes Desk Clean And Clear.
- Full Metal High Quality Body With Light Weight & Compact Size To Save Desk Space
- Control Panel & Remote Control Support Photo, Record, Digital Zoom In/Out, Menu Setting

### A36.4970

- 12.5 " Full HD 1080P Display LCD Screen, Plug & Play Design Show Live Image Automatically.
- Professional Multi-Function Image Processing Software Support Measure Function On Computer
- Unique Design Back Focus Knob On Camera Extends Working Distance To 44 ~ 230mm.
- 360° Universal Hinge Bracket Design Supports Arbitrary Hovering, Flexible To View Any Angle
- Comprehensive Magnification 3.6x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)
- Dual LED Ring Light With Independent Control Switch Both Brightness Adjustable
- One Power Cord For All Microscope & LCD Makes Desk Clean And Clear.
- Full Metal High Quality Body With Light Weight & Compact Size To Save Desk Space
- Control Panel & Remote Control Support Photo, Record, Digital Zoom In/Out, Menu Setting

### A36.4971

- 12.5 " Full HD 1080P Display LCD Screen, Plug & Play Design Show Live Image Automatically.
- Professional Multi-Function Image Processing Software Support Measure Function On Computer
- Unique Design Back Focus Knob On Camera Extends Working Distance To 44 ~ 230mm.
- Stainless Pole Stand With Metal Holder, Assure Vertical 180° And Move Up/Down Easily
- Comprehensive Magnification 6.0x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)
- Dual LED Ring Light With Independent Control Switch Both Brightness Adjustable
- One Power Cord For All Microscope & LCD Makes Desk Clean And Clear.
- Full Metal High Quality Body With Light Weight & Compact Size To Save Desk Space
- Control Panel & Remote Control Support Photo, Record, Digital Zoom In/Out, Menu Setting

## Features

A34.4970, A36.4970 HDMI +USB LCD Digital Microscope		A34.4970	A36.4970	A36.4971
Data Output	5G WIFI Output	-	-	-
	HDMI Output	●	●	●
	USB Output	●	●	●
Magnification	5.3x-39.4x, On 12.5" LCD Monitor	●		
	3.6x-39.4x, On 12.5" LCD Monitor		●	
	6.0x-39.4x, On 12.5" LCD Monitor			●
Resolution	2.0M	●	●	●
Sensor	SONY CMOS IMX291	●	●	●
Max Pixels	1920x1080 (2,073,600 Pixels)	●	●	●
Sensor Size	1/2.8" (6.058mm(H) x 4.415mm(V))	●	●	●
Pixel Size	2.9µm x 2.9µm	●	●	●
Dynamic Range	128dB	●	●	●
SNR	30dB	●	●	●
Spectral Response	380~650nm	●	●	●
Exposure	Real-time Auto, Single Auto, Manual Adjustment	●	●	●
White Balance	Real-time Automatic, Single Automatic, Manual R/G/B Adjustment	●	●	●
HDM Port	Output Image Max 1920x1080P, 60fps, Auto-adaptive Display	●	●	●
USB Type C Port	Support 2 Modes: Power In, Or USB Image Output To Computer	●	●	●
Storage	TF Card, Max Support 128G	●	●	●
Remote Control	Support Photo, Record, Digital Zoom In/Out, Menu Setting	●	●	●
Record Format	Photo 1920x1080 Format JPG	●	●	●
	Video: 1920X1080P, 60fps1920X1080P30,1280x720P120,1280x720P60 Format MOV			
Power By	DC 5V 900mA, By USB Port	●		
	DC 12V 3A, By Adapter Connected To LCD Screen		●	●
Working Distance	44mm~230mm	●	●	●
Depth of View	0.8mm~6.5mm	●	●	●
Field of View	7mmx4mm (At The Highest Magnification 39.4x) to 45.7mmx25.8mm (At The Lowest Magnification 6x)	●	●	●
Focus	Extra Back Focus Knob, Focus To Clear Image Quickly And Easily In Large Range, Extend Working Distance To 44mm~230mm			
Light Source	Dual LED Ring Light Built-in, Vertical Illumination And Diffuse Illumination Independent Switch, Both Brightness Adjustable			
LCD Screen	Size: 12.5" Full HD 1080p Display Type: a-Si TFT-LCD/IPS/Fog Screen Number of Pixels: 1920x1080 Display Color: 16.7M Panel Brightness: 300 nits Contrast: 800:1 Viewing Angle: Horizontal/Vertical 170° Adjustable	-	●	●
Stand	360° Universal Hinge Bracket Design, Supports Arbitrary Hovering, Flexible And Easy To View Object From Any Angle	●	●	
	Stainless Pole Stand With Metal Holder, Assure Vertical 180° And Move Up/Down Easily			●
	Metal Plate Size 180x215mm, Large Size For Mobile Repair Work	●	●	●

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable



# A36.4970

## 12.5" LCD HDMI+USB Digital Microscope, 3.6x-39.4x, 2.0M

**OPTO-EDU**



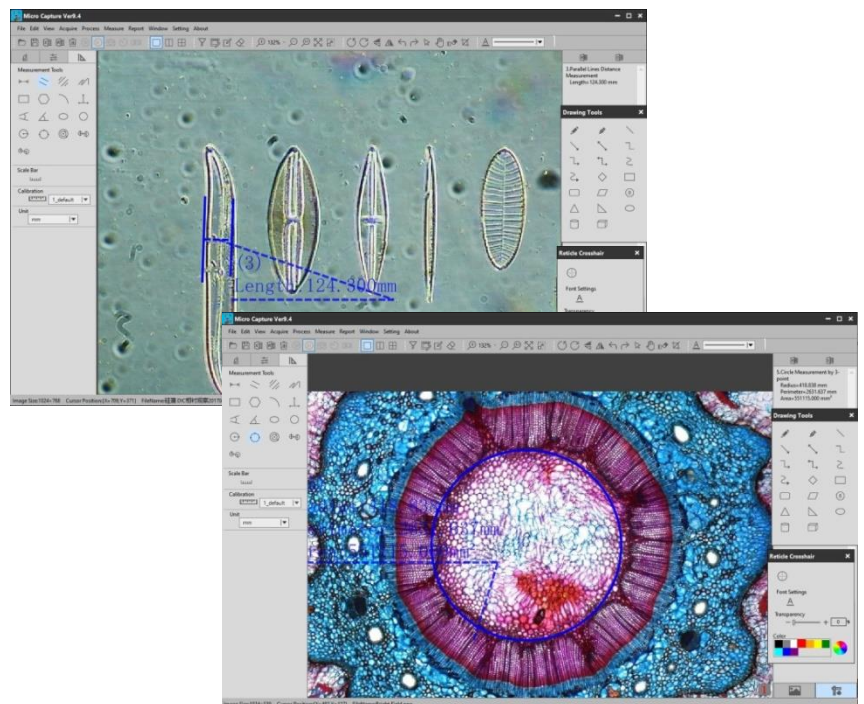
12.5" Full HD 1080P Display LCD Screen, Plug & Play Design Show Live Image Automatically.

Professional Multi-Function Image Processing Software Support Measure Function On Computer

Unique Design Back Focus Knob On Camera Extends Working Distance To 44~230mm  
Stainless Pole Stand With Metal Holder, Assure Vertical 180° And Move Up/Down Easily  
Comprehensive Magnification 3.6x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)



### ◆ Measurement Calibration



## Product Specification



A34.4970



A36.4970



A36.4971

A34.4970, A36.4970, A36.4971 Series HDMI+USB LCD Digital Microscope, is newly developed in 2021 for industry inspection, mobile repair and etc. work.

### A34.4970

- Professional Multi-Function Image Processing Software Support Measure Function On Computer
- Unique Design Back Focus Knob On Camera Extends Working Distance To 44 ~ 230mm.
- 360° Universal Hinge Bracket Design Supports Arbitrary Hovering, Flexible To View Any Angle
- Comprehensive Magnification 5.3x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)
- Dual LED Ring Light With Independent Control Switch Both Brightness Adjustable
- One Power Cord For All Microscope & LCD Makes Desk Clean And Clear.
- Full Metal High Quality Body With Light Weight & Compact Size To Save Desk Space
- Control Panel & Remote Control Support Photo, Record, Digital Zoom In/Out, Menu Setting

### A36.4970

- 12.5 " Full HD 1080P Display LCD Screen, Plug & Play Design Show Live Image Automatically.
- Professional Multi-Function Image Processing Software Support Measure Function On Computer
- Unique Design Back Focus Knob On Camera Extends Working Distance To 44 ~ 230mm.
- 360° Universal Hinge Bracket Design Supports Arbitrary Hovering, Flexible To View Any Angle
- Comprehensive Magnification 3.6x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)
- Dual LED Ring Light With Independent Control Switch Both Brightness Adjustable
- One Power Cord For All Microscope & LCD Makes Desk Clean And Clear.
- Full Metal High Quality Body With Light Weight & Compact Size To Save Desk Space
- Control Panel & Remote Control Support Photo, Record, Digital Zoom In/Out, Menu Setting

### A36.4971

- 12.5 " Full HD 1080P Display LCD Screen, Plug & Play Design Show Live Image Automatically.
- Professional Multi-Function Image Processing Software Support Measure Function On Computer
- Unique Design Back Focus Knob On Camera Extends Working Distance To 44 ~ 230mm.
- Stainless Pole Stand With Metal Holder, Assure Vertical 180° And Move Up/Down Easily
- Comprehensive Magnification 6.0x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)
- Dual LED Ring Light With Independent Control Switch Both Brightness Adjustable
- One Power Cord For All Microscope & LCD Makes Desk Clean And Clear.
- Full Metal High Quality Body With Light Weight & Compact Size To Save Desk Space
- Control Panel & Remote Control Support Photo, Record, Digital Zoom In/Out, Menu Setting

## Features

A34.4970, A36.4970 HDMI +USB LCD Digital Microscope		A34.4970	A36.4970	A36.4971
Data Output	5G WIFI Output	-	-	-
	HDMI Output	●	●	●
	USB Output	●	●	●
Magnification	5.3x-39.4x, On 12.5" LCD Monitor	●		
	3.6x-39.4x, On 12.5" LCD Monitor		●	
	6.0x-39.4x, On 12.5" LCD Monitor			●
Resolution	2.0M	●	●	●
Sensor	SONY CMOS IMX291	●	●	●
Max Pixels	1920x1080 (2,073,600 Pixels)	●	●	●
Sensor Size	1/2.8" (6.058mm(H) x 4.415mm(V))	●	●	●
Pixel Size	2.9µm x 2.9µm	●	●	●
Dynamic Range	128dB	●	●	●
SNR	30dB	●	●	●
Spectral Response	380~650nm	●	●	●
Exposure	Real-time Auto, Single Auto, Manual Adjustment	●	●	●
White Balance	Real-time Automatic, Single Automatic, Manual R/G/B Adjustment	●	●	●
HDM Port	Output Image Max 1920x1080P, 60fps, Auto-adaptive Display	●	●	●
USB Type C Port	Support 2 Modes: Power In, Or USB Image Output To Computer	●	●	●
Storage	TF Card, Max Support 128G	●	●	●
Remote Control	Support Photo, Record, Digital Zoom In/Out, Menu Setting	●	●	●
Record Format	Photo 1920x1080 Format JPG	●	●	●
	Video: 1920X1080P, 60fps1920X1080P30,1280x720P120,1280x720P60 Format MOV			
Power By	DC 5V 900mA, By USB Port	●		
	DC 12V 3A, By Adapter Connected To LCD Screen		●	●
Working Distance	44mm~230mm	●	●	●
Depth of View	0.8mm~6.5mm	●	●	●
Field of View	7mmx4mm (At The Highest Magnification 39.4x) to 45.7mmx25.8mm (At The Lowest Magnification 6x)	●	●	●
Focus	Extra Back Focus Knob, Focus To Clear Image Quickly And Easily In Large Range, Extend Working Distance To 44mm~230mm			
Light Source	Dual LED Ring Light Built-in, Vertical Illumination And Diffuse Illumination Independent Switch, Both Brightness Adjustable			
LCD Screen	Size: 12.5" Full HD 1080p Display Type: a-Si TFT-LCD/IPS/Fog Screen Number of Pixels: 1920x1080 Display Color: 16.7M Panel Brightness: 300 nits Contrast: 800:1 Viewing Angle: Horizontal/Vertical 170° Adjustable	-	●	●
Stand	360° Universal Hinge Bracket Design, Supports Arbitrary Hovering, Flexible And Easy To View Object From Any Angle	●	●	
	Stainless Pole Stand With Metal Holder, Assure Vertical 180° And Move Up/Down Easily			●
	Metal Plate Size 180x215mm, Large Size For Mobile Repair Work	●	●	●

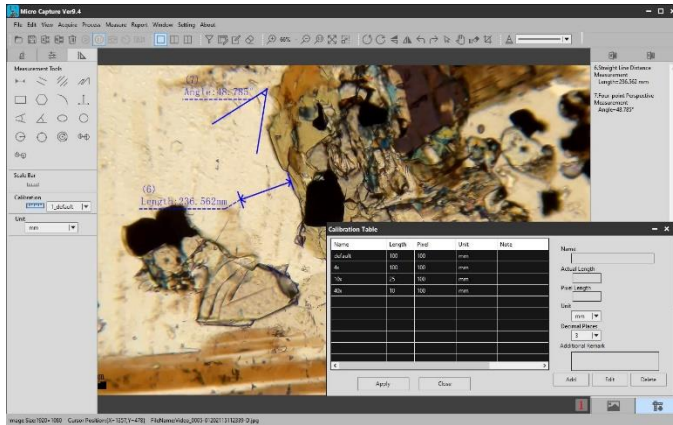
Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable



# A36.4971

## 12.5" LCD HDMI+USB Digital Microscope, 6x-39.4x, 2.0M

**OPTO-EDU**



12.5" Full HD 1080P Display LCD Screen, Plug & Play Design Show Live Image Automatically. Professional Multi-Function Image Processing Software Support Measure Function On Computer

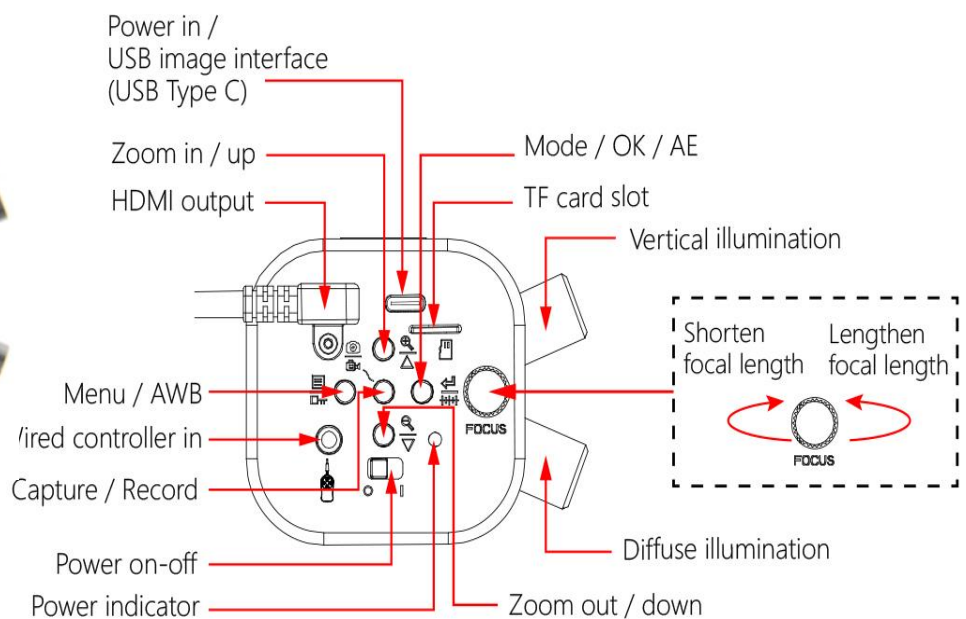
Unique Design Back Focus Knob On Camera Extends Working Distance To 44~230mm

Stainless Pole Stand With Metal Holder, Assure Vertical 180° And Move Up/Down Easily

Comprehensive Magnification 6.0x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)



**◆ Camera Button**



## Product Specification



A34.4970



A36.4970



A36.4971

A34.4970, A36.4970, A36.4971 Series HDMI+USB LCD Digital Microscope, is newly developed in 2021 for industry inspection, mobile repair and etc. work.

### A34.4970

- Professional Multi-Function Image Processing Software Support Measure Function On Computer
- Unique Design Back Focus Knob On Camera Extends Working Distance To 44 ~ 230mm.
- 360° Universal Hinge Bracket Design Supports Arbitrary Hovering, Flexible To View Any Angle
- Comprehensive Magnification 5.3x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)
- Dual LED Ring Light With Independent Control Switch Both Brightness Adjustable
- One Power Cord For All Microscope & LCD Makes Desk Clean And Clear.
- Full Metal High Quality Body With Light Weight & Compact Size To Save Desk Space
- Control Panel & Remote Control Support Photo, Record, Digital Zoom In/Out, Menu Setting

### A36.4970

- 12.5 " Full HD 1080P Display LCD Screen, Plug & Play Design Show Live Image Automatically.
- Professional Multi-Function Image Processing Software Support Measure Function On Computer
- Unique Design Back Focus Knob On Camera Extends Working Distance To 44 ~ 230mm.
- 360° Universal Hinge Bracket Design Supports Arbitrary Hovering, Flexible To View Any Angle
- Comprehensive Magnification 3.6x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)
- Dual LED Ring Light With Independent Control Switch Both Brightness Adjustable
- One Power Cord For All Microscope & LCD Makes Desk Clean And Clear.
- Full Metal High Quality Body With Light Weight & Compact Size To Save Desk Space
- Control Panel & Remote Control Support Photo, Record, Digital Zoom In/Out, Menu Setting

### A36.4971

- 12.5 " Full HD 1080P Display LCD Screen, Plug & Play Design Show Live Image Automatically.
- Professional Multi-Function Image Processing Software Support Measure Function On Computer
- Unique Design Back Focus Knob On Camera Extends Working Distance To 44 ~ 230mm.
- Stainless Pole Stand With Metal Holder, Assure Vertical 180° And Move Up/Down Easily
- Comprehensive Magnification 6.0x~ 39.4x (Based on Actual Measurement On 12.5" LCD Display)
- Dual LED Ring Light With Independent Control Switch Both Brightness Adjustable
- One Power Cord For All Microscope & LCD Makes Desk Clean And Clear.
- Full Metal High Quality Body With Light Weight & Compact Size To Save Desk Space
- Control Panel & Remote Control Support Photo, Record, Digital Zoom In/Out, Menu Setting

## Features

A34.4970, A36.4970 HDMI +USB LCD Digital Microscope		A34.4970	A36.4970	A36.4971
Data Output	5G WIFI Output	-	-	-
	HDMI Output	●	●	●
	USB Output	●	●	●
Magnification	5.3x-39.4x, On 12.5" LCD Monitor	●		
	3.6x-39.4x, On 12.5" LCD Monitor		●	
	6.0x-39.4x, On 12.5" LCD Monitor			●
Resolution	2.0M	●	●	●
Sensor	SONY CMOS IMX291	●	●	●
Max Pixels	1920x1080 (2,073,600 Pixels)	●	●	●
Sensor Size	1/2.8" (6.058mm(H) x 4.415mm(V))	●	●	●
Pixel Size	2.9µm x 2.9µm	●	●	●
Dynamic Range	128dB	●	●	●
SNR	30dB	●	●	●
Spectral Response	380~650nm	●	●	●
Exposure	Real-time Auto, Single Auto, Manual Adjustment	●	●	●
White Balance	Real-time Automatic, Single Automatic, Manual R/G/B Adjustment	●	●	●
HDM Port	Output Image Max 1920x1080P, 60fps, Auto-adaptive Display	●	●	●
USB Type C Port	Support 2 Modes: Power In, Or USB Image Output To Computer	●	●	●
Storage	TF Card, Max Support 128G	●	●	●
Remote Control	Support Photo, Record, Digital Zoom In/Out, Menu Setting	●	●	●
Record Format	Photo 1920x1080 Format JPG	●	●	●
	Video: 1920X1080P, 60fps1920X1080P30,1280x720P120,1280x720P60 Format MOV			
Power By	DC 5V 900mA, By USB Port	●		
	DC 12V 3A, By Adapter Connected To LCD Screen		●	●
Working Distance	44mm~230mm	●	●	●
Depth of View	0.8mm~6.5mm	●	●	●
Field of View	7mmx4mm (At The Highest Magnification 39.4x) to 45.7mmx25.8mm (At The Lowest Magnification 6x)	●	●	●
Focus	Extra Back Focus Knob, Focus To Clear Image Quickly And Easily In Large Range, Extend Working Distance To 44mm~230mm			
Light Source	Dual LED Ring Light Built-in, Vertical Illumination And Diffuse Illumination Independent Switch, Both Brightness Adjustable			
LCD Screen	Size: 12.5" Full HD 1080p Display Type: a-Si TFT-LCD/IPS/Fog Screen Number of Pixels: 1920x1080 Display Color: 16.7M Panel Brightness: 300 nits Contrast: 800:1 Viewing Angle: Horizontal/Vertical 170° Adjustable	-	●	●
Stand	360° Universal Hinge Bracket Design, Supports Arbitrary Hovering, Flexible And Easy To View Object From Any Angle	●	●	
	Stainless Pole Stand With Metal Holder, Assure Vertical 180° And Move Up/Down Easily			●
	Metal Plate Size 180x215mm, Large Size For Mobile Repair Work	●	●	●

Note: "●" In Table Is Standard Outfits, "○" Is Optional Accessories "-" Is Unavailable



# A36.6401

10.6" LCD Digital Stereo Microscope, 14x-90x, 12M

**OPTO-EDU**



SD Card Slot And HDMI Output To Monitor Available



**0.7x~4.5x Zoom Lens 14x-90x  
Total Magnification**

**10.6" IPS LCD Screen  
Resolution 1366\*768**

10.6" IPS LCD Screen Resolution 1366\*768  
0.7x~4.5x Zoom Lens 14x-90x Total Magnification  
Full HD 12.0M Image And 1080p/30fps Video  
Upper + Side LED Light Brightness Adjustable  
SD Card Slot And HDMI Output To Monitor Available

# Product Specification



**A32.6401-12M**



**A36.6401-12M**



**A32.6401-12MH**

A32.6401, A36.6401 Series Digital Microscope			A32.6401 -12M	A36.6401 -12M	A36.6401 -12MH
LCD Screen	Size	10.6" IPS LCD		●	●
	Resolution	1366*768		●	●
Digital Camera	Camera Pixel	12MP	●	●	●
	Video Resolution	1080p/60fps	●	●	●
	Data Output	HDMI	●		●
	WDR	Yes	●	●	●
	Function	Auto Exposure, Exposure Offset Auto White Balance Photo, Video Recording	●	●	●
	Storage	SD Card Storage (Max 32G)	●	●	●
	External Interface	Projector/Monitor With HDMI Port	●		●
Optical	Objective	0.7x~4.5x Zoom Lens	●	●	●
	Total Magnification	14x~90x On 10.6" LCD Screen	●	●	●
	Illumination	Side/Up LED Light, Brightness Adjustable	●	●	●
	Focus Range	60mm	●	●	●
	Working Distance	88mm	●	●	●
Stand	Column	Round Pole, Dia.25mm	●	●	●
	Stand	380mm*250mm*20mm, Black 320mm*260mm*20mm, White (Same Cost)	● o	● o	● o
Optional	A52.6401-0.5	Auxilliary Lens 0.5x	o	o	o
	A52.6401-2.0	Auxilliary Lens 2.0x	o	o	o
	Boot Logo		o	o	o
	WiFi SD Card, Upgrade To WiFi Microscope		o	o	o
	SD Card		o	o	o
Power	DC 12V1A, Wide Range 100~240V AC Adapter		●	●	●
Remark: "●" Means Standard Outfit, "o" Means Optional					

# A36.5101

7" LCD Stereo + USB Portable Dual Lens Digital Microscope, 2.0M+1.3M

**OPTO-EDU**



**Detection Of Various Currencies & Commemorative Coins & Banknotes & Stamps**

Brand New Design Dual Lens LCD + Portable Digital Microscope For Different Purposes  
7.0" LCD, Main Body 2.0M Camera, 5x-35x Zoom For Real Time Clear Watching  
Portable USB2.0 1.3M Digital Microscope, 1.5x-25x Zoom For Large Size Objective Watch on LCD  
USB Output To Win/Mac, With Professional StrangeView Measuring Software  
Support Max 32G TF Card To Take Photo & Video, Power By 5V2A Adapter

## Specification

### A36.5101 7" LCD Stereo + USB Portable Dual Lens Digital Microscope, 2.0M+1.3M

LCD Screen	7" IPS Screen, With Touch Button To Take Photo & Video, One Key Switch Between Main Body Camera & Portable USB Camera
Handheld Camera	1.3M Digital Camra, Zoom Lens 1.5x~25x, Output to 7" LCD Screen 8 LEDs Light, Brightness Adjustable
Main Body Camera	2.0M Digital Camra, Zoom Lens 5x~35x, TF Card, USB Output Coaxial LED Ring Light, Brightness Adjustable
TF Card Output	Support Max 32G, To Take Photo & Video
USB Output	To Win/Mac, With Professional StrangeView Measuring Software
Stand	Pole Stand, With Focusing Knob, Size 180x170mm
Size	180*170*322mm
Power Supply	DC 5V2A Adapter, Can Be Powered By USB Power Bank For Outdoor Use
Package	Color Box + Foam, 1 pc/1 Box, With Software Disc, DC Adapter, Instruction Manual



# A36.5102

## 7" LCD Stereo + USB Portable Dual Lens Digital Microscope, 2.0M+1.3M

**OPTO-EDU**



Brand New Design Dual Lens LCD + Portable Digital Stereo Microscope For Different Purposes  
0.7x~4.5x Zoom Stereo Trinocular Microscope With WF10x/20mm Eyepiece  
7.0" LCD, Main Body 2.0M Camera, 5x-35x Zoom For Real Time Clear Watching  
Portable USB2.0 1.3M Digital Microscope, 1.5x-25x Zoom For Large Size Objective Watch on LCD  
USB Output To Win/Mac, With Professional StrangeView Measuring Software

## Specification

### A36.5102 7" LCD Stereo + USB Portable Dual Lens Digital Microscope, 2.0M+1.3M

LCD Screen	7" IPS Screen, With Touch Button To Take Photo & Video, One Key Switch Between Main Body Camera & Portable USB Camera
Handheld Camera	1.3M Digital Camra, Zoom Lens 1.5x~25x, Output to 7" LCD Screen 8 LEDs Light, Brightness Adjustable
Main Body Camera	2.0M Digital Camera, Zoom Lens 5x~35x, TF Card, USB Output Coaxial LED Ring Light, Brightness Adjustable
TF Card Output	Support Max 32G, To Take Photo & Video
USB Output	To Win/Mac, With Professional StrangeView Measuring Software
Stand	Pole Stand, With Focusing Knob, Size 180x170mm
Size	180*170*322mm
Power Supply	DC 5V2A Adapter, Can Be Powered By USB Power Bank For Outdoor Use
Package	Color Box + Foam, 1 pc/1 Box, With Software Disc, DC Adapter, Instruction Manual

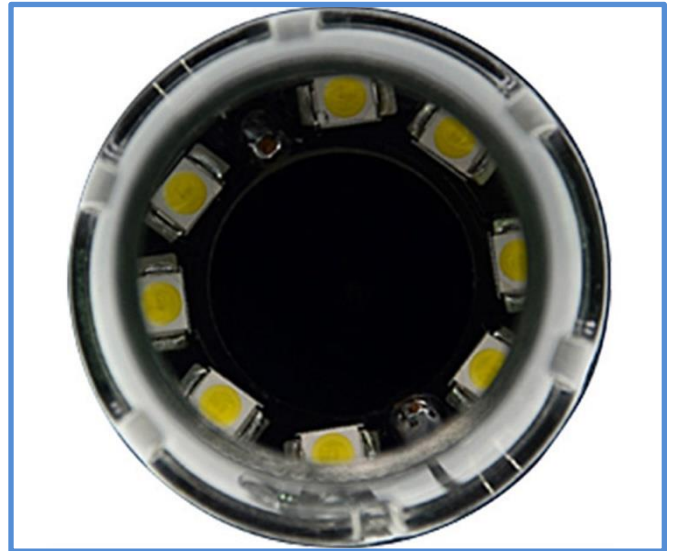
# A34.4191

## USB Digital Microscope

**OPTO-EDU**



Optical zoom in/out support total magnification 50x-1000x



Built-in 8LEDs lamp auxiliary lighting, uniform light source, soft and not dazzling

## Product Specification

### A34.4191 USB Digital Microscope

Magnification	50x-1000x
Image Sensor	1/6.5" Color CMOS Image Sensor
Resolution	640x480, 30Fps
White Balance	Auto
Connection	USB2.0
Illumination	8LEDs, Brightness Adjustable
USB Support	Win10, Win8, Win7, XP, Mac
Output	BMP, JPEG
SNR	Max 42dB



# A34.4199

## WIFI+USB Miroscope, 1000x, 2.0M, iPad/Android/Win/Mac

**OPTO-EDU**



Optical zoom in/out support total magnification 50x-1000x



Built-in 8LEDs lamp auxiliary lighting, uniform light source, soft and not dazzling

## Product Specification

### A34.4199 WIFI Digital Microscope

Magnification	50x-1000x
Lens Diameter	8.0mm
Resolution	640x480, 1920x1080
Pixel	2.0M
Battery	3 hours Battery Life
WIFI Transmission Distance	WIFI 10m Range
Illumination	8LEDs
WIFI Support	Android, IOS, USB Support Win, Mac
Output	MJPEG/AVI
Color	Black/Grey/Blue (Optional)



# A59.5102

## USB2.0 CMOS Eyepiece Camera, 5.0M, Eyepiece Type

**OPTO-EDU**



A59.5102+A11.1020

5.0MP, USB Cable, Software Disc, Eyepiece Mount



# A59.5103

## USB2.0 CMOS Eyepiece Camera, 5.0M, Eyepiece Type

**OPTO-EDU**



A59.5103+A11.5121-M



USB2.0 CMOS Eyepiece Camera, 5.0M, C-Mount

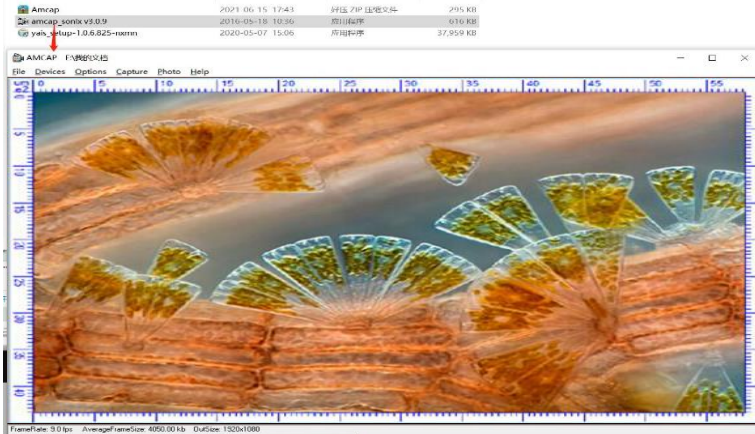




# A59.2205-E

## USB2.0 CMOS Digital Eyepiece Camera

**OPTO-EDU**



Compact Design Digital Eyepiece Used In Microscope Eyepiece Tube  
 2.0M Pixels Full HD 1920\*1080 USB2.0 CMOS Sensor  
 USB 2.0 Output To Computer or Laptop, No Need Driver  
 Professional Analysis Software Measure Function For Windows  
 Diameter 23.2mm, With Adapter Ring 30mm, 30.5mm For Using In Eyepiece Tube

### A59.2205-E USB2.0 CMOS Digital Eyepiece Camera

Computer Interface	USB2.0
Microscope Interface	23.2mm
Pixel	200W
Nosepiece	Sextupe Nosepiece
Chip	1/3 APTINA COMS
Voltage	5V
Electric Current	200MA
Transmission Speed	1600X1200 YUY2@15FPS 1280X1024 YUY2@8FPS 800X600 YUY2@30FPS 640X480 YUY2@30FPS 320X240 YUY2@30FPS

### Standard Packing List

A	Gift Box
B	CD (Driver & utilities software, Ø8cm)
C	CMOS USB2.0 C-Mount camera
D	Dia.23.2mm to 30.5mm Ring Adaptor for 30.5mm eyepiece tube
E	Dia.23.2mm to 30.0mm Ring Adaptor for 30mm eyepiece tube
F	USB2.0 Wire



# A59.2205

## USB2.0 CMOS Digital Eyepiece Camera

**OPTO-EDU**



Compact Design Digital Eyepiece For Using In Eyepiece Tube  
350K ~ 5.0M Pixels USB2.0 CMOS Sensor  
USB 2.0 Output, With Professional Analysis Software  
Support WinXP, Win7, Win10, IOS, Linux System  
Diameter 23.2mm, With Adapter Ring 30mm, 30.5mm For Using In Eyepiece Tube



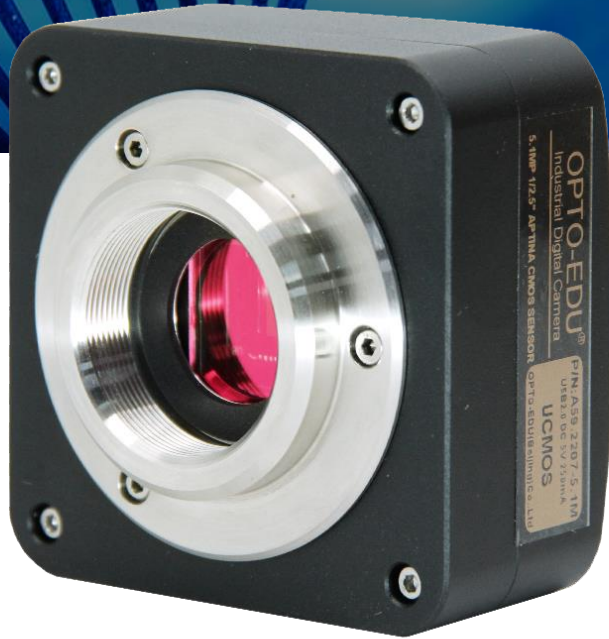
# Product Specification

Item No.	Sensor & Size(mm)	Pixel(μm)	G Sensitivity Dynamic Range SN Ratio	FPS/Resolution	Binning	Exposure
A59.2205-5.0MPA	5.0M/Aptina(C) 1/2.5"(5.70x4.28)	2.2x2.2	NA	2@2592x1944 3@2048x1536 5@1600x1200 7.5@1280x1024	N/A	Auto
A59.2205-5.0MPB	5.0M/SC5033(C) 1/2.7"(5.18x3.89)	2.0x2.0	2.0V/lux-sec 64dB 35dB	20@2592x1944 20@2048x1536 20@1600x1200 30@800x600	N/A	Auto
A59.2205-3.0MPA	3M/Aptina(C) 1/2.7"(4.506x3.38)	2.2x2.2	NA	3@2048x1536 5@1600x1200 7.5@1280x1024	N/A	Auto
A59.2205-2.0MPA	2M/Aptina(C) 1/3.2"(4.48x3.36)	2.8x2.8	NA	5@1600x1200 7.5@1280x1024 7.5@1280x960 20@800x600	N/A	Auto
A59.2205-2.0MPB	2M/OV2710(C) 1/2.7"(5.76x3.24)	3x3	3.3V/Lux-sec 69dB 39dB	25@1920x1080 30@1280x1024 30@1280x720	N/A	Auto
A59.2205-1.3MPA	1.3M/Aptina(C) 1/3"(4.60x3.70)	3.6x3.6	NA	7.5@1280x1024 12.5@1024x768 12.5@800x600	N/A	Auto
A59.2205-920KPA	0.92M/BG0703(C) 1/2.7"(5.76x3.24)	4.5x4.5	5.8V/Lux-sec 65dB 43dB	25@1280x720 25@640x480	N/A	Auto
A59.2205-350KPA	0.35M/Aptina(C) 1/4"(3.58x2.69)	5.6x5.6	NA	30@640x480	N/A	Auto
<b>OTHER HARDWARE CONFIGURATION</b>						
Spectral Range		380-650nm (with IR-filter)				
White Balance		Auto				
Color Rendering Technique		NA				
Capture/Control API		Native C/C++, Directshow, Twain				
Recording System		Still Picture and Movie				
Cooling System*		Natural				
<b>OPERATING ENVIRONMENT</b>						
Operating Temperature		-10°C~ 50°C				
Storage Temperature		-20°C~ 60°C				
Operating Humidity		30~80%RH				
Storage Humidity		10~60%RH				
Power Supply		DC 5V over PC USB Port				
<b>SOFTWARE ENVIRONMENT</b>						
Operating System		Support Microsoft Windows XP / Vista / 7 / 8 (32 & 64 bit) OS X (Mac OS X), Linux				
PC Requirements		CPU: Equal to Intel Core2 2.8GHz or Higher				
		Memory: 2GB or More				
		USB port: USB2.0 High-speed Port				
		Display: 17"or Larger				
		CD-ROM				

# A59.2208

## USB2.0 CMOS Digital Camera, C-Mount

**OPTO-EDU**



USB 2.0 Output, With Professional Analysis Software  
350K ~ 14.0M Pixels USB2.0 CMOS Sensor  
Standard C-Mount For Using In Trinocular Photo Port  
With Adapter Ring 30mm, 30.5mm For Using In Eyepiece Tube  
Support WinXP, Win7, Win10, iOS, Linux System





# Product Specification

Item No.	Sensor & Size(mm)	Pixel(μm)	G Sensitivity		FPS/Resolution	Binning	Exposure
			Dynamic Range				
			SN Ratio				
A59.2208-14M	14M/MT9F002(C) 1/2.3"(5.73x4.60)	1.4x1.4	0.724v/lux-sec 65.3dB 35.5dB		1.8@4096x3288 10@2048x1644 27@1024x822	1x1 2x2 4x4	0.4ms~2000ms
A59.2208-10M	10M/MT9J003(C) 1/2.3"(5.98x4.59)	1.67x1.67	0.31v/lux-sec 65.2dB 34dB		1.9@3584x2748 8@1792x1374 27@896x684	1x1 2x2 4x4	0.4ms~2000ms
A59.2208-9.0M	9.0M/Special(C) 1/2.4"(5.83x4.37)	1.67x1.67	0.31v/lux-sec 65.2dB 34dB		1.9@3488x2616 8@1744x1308 27@872x654	1x1 2x2 4x4	0.4ms~2000ms
A59.2208-8.0M	8M/Special(C) 1/2.5"(5.45x4.09)	1.67x1.67	0.31v/lux-sec 65.2dB 34dB		1.9@3264x2448 8@1600x1200 27@800x600	1x1 2x2 4x4	0.4ms~2000ms
A59.2208-5.1M	5.1M/MT9P006(C) 1/2.5"(5.70x4.28)	2.2x2.2	0.53 V/lux-sec 66.5dB 40.5dB		5@2592x1944 18@1280x960 60@640x480	1x1 2x2 4x4	0.294ms~2000ms
A59.2208-3.1M	3.1M/MT9T001(C) 1/2"(6.55x4.92)	3.2x3.2	1.0 V/lux-sec 61dB 43dB		8@2048x1536 22@1024x768 43@680x510	1x1 2x2 3x3	0.244ms~2000ms
A59.2208-2.0M	2.0M/Special(C) 1/2.6"(5.12x3.84)	3.2x3.2	1.0 V/lux-sec 61dB 43dB		16@1600x1200 50@800x600	1x1 2x2	0.244ms~2000ms
A59.2208-1.3M	1.3M/MT9M111(C) 1/3"(4.60x3.70)	3.6x3.6	1.0V/lux-sec 71dB 44dB		15@1280x1024 26@640x512 50@320x256	1x1 2x2 4x4	0.14ms~2000ms
A59.2208-350K	0.35M/MT9V011(C) 1/4"(3.58x2.69)	5.6x5.6	1.9V/lux-sec 60dB 45dB		30@640x480 80@320x240	1x1 2x2	0.111ms~192.6ms

## OTHER HARDWARE CONFIGURATION

Spectral Range	380-650nm (with IR-filter)
White Balance	ROI White Balance/ Manual Temp-Tint Adjustment
Color Rendering Technique	Ultra Fine Color Engine
Capture/Control API	Native C/C++, Directshow, Twain
Recording System	Still Picture and Movie
Cooling System*	Natural

## OPERATING ENVIRONMENT

Operating Temperature	-10°C~ 50°C
Storage Temperature	-20°C~ 60°C
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	DC 5V over PC USB Port

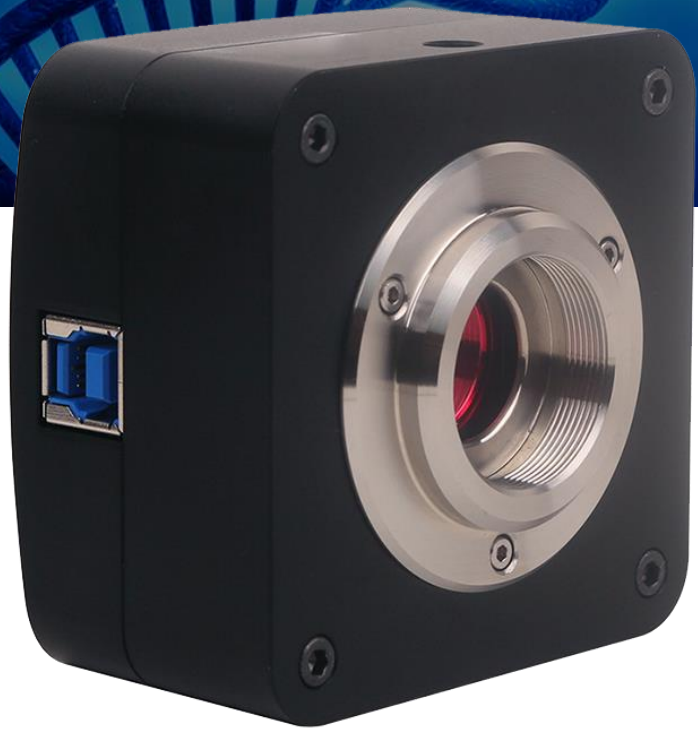
## SOFTWARE ENVIRONMENT

Operating System	Support Microsoft Windows XP / Vista / 7 / 8 (32 & 64 bit) OS X (Mac OS X), Linux
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher
	Memory: 2GB or More
	USB port: USB2.0 High-speed Port
	Display: 17"or Larger
	CD-ROM

# A59.2211

## USB3.0 CMOS Digital Camera

OPTO-EDU



USB 3.0 Output, With Professional Analysis Software  
3.1M ~ 18.0M Pixels USB3.0 CMOS Sensor  
Standard C-Mount For Using In Trinocular Photo Port  
Support WinXP, Win7, Win10, iOS, Linux System  
Adapter Ring 30mm, 30.5mm Optional For Using In Eyepiece Tube



# Product Specification

Item No.	Sensor & Size(mm)	Pixel(μm)	G Sensitivity	FPS/Resolution	Binning	Exposure
			Dynamic Range SN Ratio			
A59.2211-18MPA	18M/AR1820(C) 1/2.3"(6.14x4.61)	1.25x1.25	0.62 V/lux-sec 65.8dB 36.3dB	5.6@4912x3684" 18.1@2456x1842 32.2@1228x922	1x1 2x2 4x4	0.1ms~2000ms
A59.2211-16MPA	16M/MN34120(C) 1/2.33"(6.18x4.66)	1.335x1.335	R:2453LSB Gr:2444LSB Gb:1054LSB B: 996LSB	6.0@4648x3506 15.0@2304x1750 26.0@1536x1168	1x1 2x2 3x3	0.2ms~2000ms
A59.2211-16MPB	16M/MN34230PLJ(C) 4/3"(17.6x13.3)	3.8x3.8	R:1315LSB Gr:2413LSB Gb:2413LSB B:1042LSB (Gain = 0dB)	6.0@4648x3506 15.0@2304x1750 30.0@1536x1168	1x1 2x2 3x3	0.06ms~15s
A59.2211-16MMB	16M/MN34230ALJ(M) 4/3"(17.6x13.3)	3.8x3.8	A:2650LSB B:2650LSB C:2650LSB D:2650LSB (Gain=0dB)	22@4640x3506 36@3840x2160 43@2304x1750 43@1920x1080 49@1536x1168	1x1 2x2 3x3	0.24ms~15s
A59.2211-14MPA	14M/MT9F002(C) 1/2.3"(5.73x4.60)	1.4x1.4	0.724v/lux-sec 65.3dB 35.5dB	6.2@4096x3286 20.8@2048x1644 53.3@1024x822	1x1 2x2 4x4	0.4ms~2000ms
A59.2211-10MPA	10M/MT9J003(C) 1/2.3"(5.98x4.58)	1.67x1.67	0.31v/lux-sec 65.2dB 34dB	7.2@3584x2746 24.5@1792x1372	1x1 2x2 4x4	0.38ms~2000ms
A59.2211-10MMA	10M/MT9J003(M) 1/2.3"(5.98x4.58)	1.67x1.67	0.4v/lux-sec 65.2dB 34dB	7.2@3584x2746 24.5@1792x1372	1x1 2x2 4x4	0.38ms~2000ms
A59.2211-8.5MPA	8.5M/Special(C) 1/2.5"(5.56x4.26)	1.67x1.67	0.31v/lux-sec 65.2dB 34dB	8.3@3328x2548 26.2@1664x1272	1x1 2x2 4x4	0.1ms~2000ms
A59.2211-5.1MPA	5.1M/MT9P006(C) 1/2.5"(5.70x4.28)	2.2x2.2	1.76v/lux-sec 67.74dB 38.5dB	14.2@2560x1922 38.3@1280x960 101.2@640x480	1x1 2x2 4x4	0.1ms~2000ms
A59.2211-3.1MPA	3.1M/AR0330(C) 1/3"(4.51x3.38)	2.2x2.2	1.9v/lux-sec 100dB 39dB	27.3@2048x1534 53.3@1024x770	1x1 2x2	0.1ms~2000ms
<b>OTHER HARDWARE CONFIGURATION</b>						
Spectral Range	380-650nm (with IR-filter)					
White Balance	ROI White Balance/ Manual Temp-Tint Adjustment					
Color Rendering Technique	Ultra Fine Color Engine					
Capture/Control API	Native C/C++, C#, Directshow, Twain, Labview					
Recording System	Still Picture and Movie					
Cooling System*	Natural					
<b>OPERATING ENVIRONMENT</b>						
Operating Temperature	-10°C~ 50°C					
Storage Temperature	-20°C~ 60°C					
Operating Humidity	30~80%RH					
Storage Humidity	10~60%RH					
Power Supply	DC 5V over PC USB Port					
<b>SOFTWARE ENVIRONMENT</b>						
Operating System	Support Microsoft Windows XP / Vista / 7 / 8 / 10(32 & 64 bit) OS X (Mac OS X), Linux					
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher					
	Memory: 2GB or More					
	USB port: USB2.0 High-speed Port					
	Display: 17" or Larger CD-ROM					



# A59.2213

## USB3.0 CMOS Digital Camera, High Fps

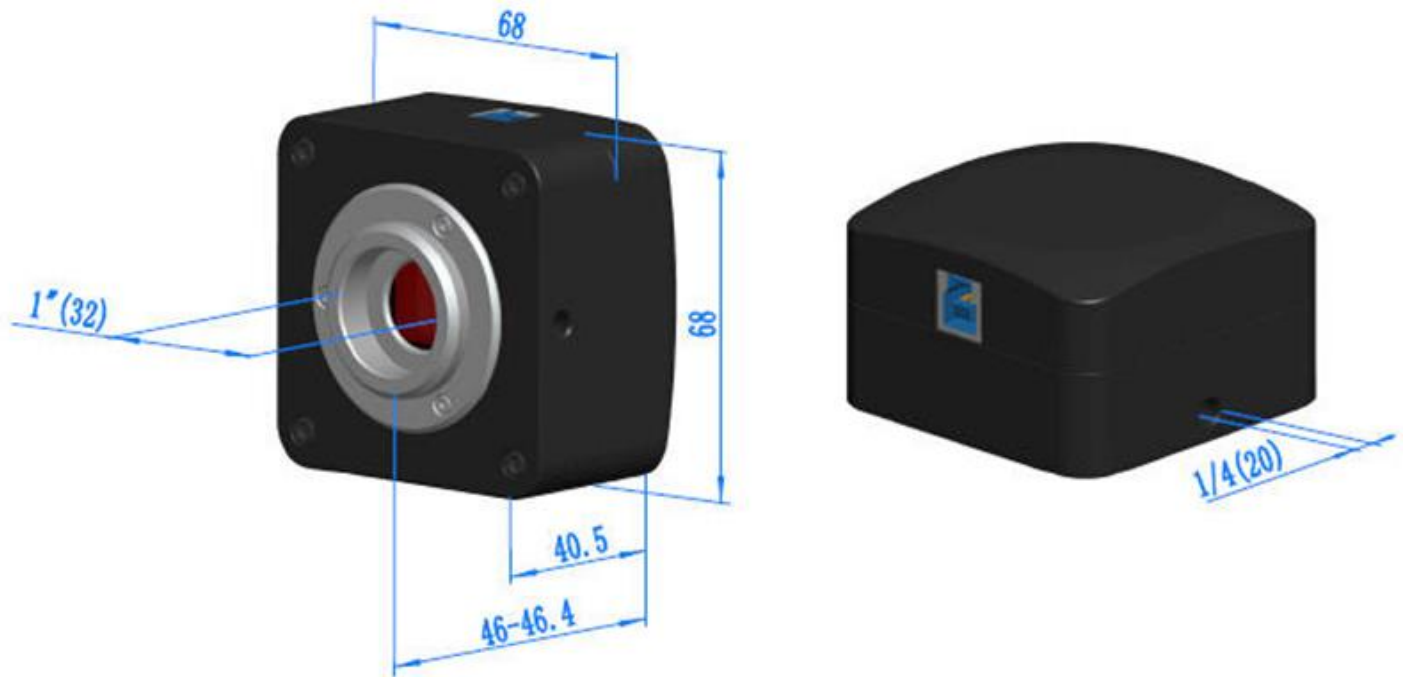
OPTO-EDU



USB3.0 Output, With Professional Analysis Software  
1.5M ~ 21.0M Pixels USB3.0 CMOS Sensor  
High Fps 192@584x438 For High Speed Record Requirement  
Designed For Low Light Source Like Fluorescent View  
Adapter Ring 30mm, 30.5mm Optional For Using In Eyepiece Tube



## Product Size



## Product Specification

Model	Sensor Size	Pixel	FPS	Exposure Time
20M	20M/IMX183(C) 1"(13.06x8.76)	2.4 x2.4	15@5440x3648 50@2736x1824 60@1824x1216	0.1ms~15s
12.3M	12.3M/IMX304(C,GS) 1.1"(14.13x10.35)	3.45x3.45	23.4@4096x3000 46.3@2048x1500	0.244ms~15s
12M	12M/IMX226(C) 1/1.7"(7.40x5.55)	1.85x1.85	25@4000x3000 50@2048x1080	0.1ms~15s
9M	9.0M/IMX305(C,GS) 1"(14.13x7.45)	3.45x3.45	34@4096x2160 60@2048x1080	0.1ms~15s
8.3MA	8.3M/IMX274(C) 1/2.5"(6.22x3.50)	1.62x1.62	32@3840x2160 65@1920x1080	0.244ms~15s
8.3MB	8.3M/IMX334(C) 1/1.8"(7.68x4.32)	2.0x2.0	35@3840x2160 60@1920x1080	0.105ms~15s
6.3MA	6.3M/IMX178(C) 1/1.8"(7.37x4.92)	2.4 x2.4	30@3072 x2048 38@1536x 1024	0.1ms~15s
6.3MB	6.3M/IMX178(C) 1/1.8"(7.37x4.92)	2.4 x2.4	59@3072 x2048 59@1536x 1024	0.02ms~15s
5M	5.0M/IMX264(C, GS) 2/3"(8.45x7.07)	3.45x3.45	35@2448x2048 50@1224x1024	0.1ms~15s
3.1MA	3.1M/IMX265(C, GS) 1/1.8"(7.07x5.30)	3.45x3.45	53@2048x1536 85@1024x768	0.1ms~15s
3.1MB	3.1M/IMX123(C) 1/2.8"(5.12x3.84)	2.5x2.5	50@2048x1536 50@1920x1080	0.1ms~15s
2M	2M/IMX385(C) 1/2"(7.2x4.05)	3.75x3.75	125@1920x1080	0.1ms~15s
1.5M	1.5M/IMX273(C, GS) 1/2.9"(4.968x3.726)	3.45x3.45	164@1440x1080 320@720x540	0.1ms~15s

# A59.2223

## WIFI+HDMI Digital Camera, 1080p, USB Mouse

**OPTO-EDU**



HDMI+WIFI+SD Digital Camera 5.0M, 2.0M  
High 60fps@1080p (HDMI), 25fps@1080p (WIFI)  
HDMI & WIFI Real Time Image Output At Same Time  
Mouse Control & Measurement Under HDMI Interface  
Incl. USB Mouse/USB WiFi Adapter





# Product Specification

Sensor & Size	1080P/5M/ Sony IMX178©1/1.8"(6.22x4.67)	1080P/2M/ Sony IMX185© 1/1.9"(7.20x4.05)	1080P/2M/ 1/1.9"(7.20x4.05) 1/1.2"(11.25x6.33)
Pixel(μm)	2.4x2.4	3.75x3.75	5.86x5.86
G Sensitivity	425 mv with 1/30s	1120 mv with 1/30s	1016 mv with 1/30s
Dark Signal	0.15 mv with 1/30s	0.15 mv with 1/30s	0.15 mv with 1/30s
FPS/Resolution	60@1920x1080 (HDMI)	60@1920x1080 (HDMI)	60@1920x1080 (HDMI)
	25@1920x1080 (WIFI)	25@1920x1080 (WIFI)	25@1920x1080 (WIFI)
Binning	1x1	1x1	1x1
Exposure	0.03ms~918ms	0.06ms~918ms	0.043ms~1000ms
Interface & Button Functions			
USB	USB Camera or USB Mouse		
HDMI	HDMI Output		
DC12V	12V Power in		
SD	SD Card Slot		
ON/OFF	Power On/Off Switch		
LED	Power On Indicator		
Other Specification for HDMI Output			
UI Operation	With USB Mouse		
Image Capture	JPEG Format with 5M Resolution in SD Card		
	JPEG Format with 2M Resolution in SD Card		
Video Record	ASF Format 1080P 30fps in SD Card		
Camera Control Panel	Including Exposure, Gain, White Balance, Color Adjustment, Sharpness and Denoising Control		
Toolbar	Including Zoom, Mirror, Comparison, Freeze, Cross, Browser Function		
Other Specification for WIFI Output			
UI Operation	With USB Mouse to Operate on the embedded XCamView		
WIFI Performance	802.11n 150Mbps; RF Power 20dBm(Maximum)		
Maximum Connected Devices	3~6(According to the Environment and Connection Distance)		
White Balance	Auto White Balance		
Color Technique	Ultra-Fine Color Engine (WIFI)		
Capture/Control API	Standard SDK for Windows/Linux/Mac(WIFI)		
Recording System	Still Picture or Movie (WIFI)		
Software Environment (for USB2.0 Connection)			
Operating System	Microsoft® Windows® XP /Vista /7/8/8.1/10(32 & 64 bit)		
	OSx(Mac OS X)		
	Linux		
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher		
	Memory: 4GB or More		
	USB Port: USB2.0 High-speed Port		
	Display: 19" or Larger		
	CD-ROM		
Operating Environment			
Operating Temperature	-10~50(in Centidegree)		
Storage Temperature	-20~60(in Centidegree)		
Operating Humidity	30~80%RH		
Storage Humidity	10~60%RH		
Power Supply	DC 12V/2A Adaptor		
Overall Dimensions			
Width x Depth x Height	78 mm (3.07") x 70 mm (2.76") x 92mm (3.62")		
Shipping Weight	0.47 kg (1.0lbs)		

# A59.2225

USB3.0 CMOS Cooled Digital Camera, Fluorescent Use

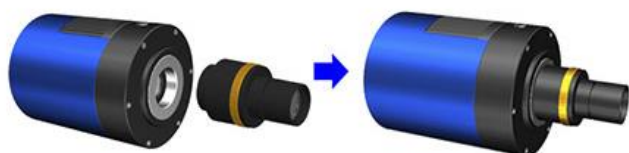
OPTO-EDU



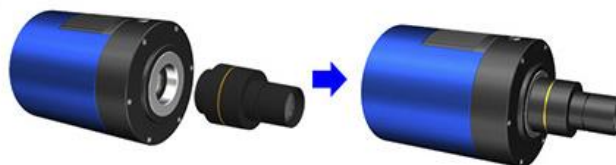
USB 3.0 Output, 10.3M To 20.0M Resolution With Professional Analysis Software  
Two-stage TE-cooling System  $-45^{\circ}\text{C}$  below Camera Body Temperature  
Low Light Source Fluorescent, DIC View, 1 Hour Exposure  
External Power Adapter for Cooling System, DC12V,3A  
Support Microsoft Windows XP / Vista / 7 / 8 / 10(32 & 64 bit)



# Product Specification



A59.2225 + A55.2202-A



A59.2225 + A55.2202-F

Item No.	Sensor & Size(mm)	Pixel(μm)	G Sensitivity		FPS/Resolution	Binning	Exposure
			Dark Signal				
A59.2225-20MPA	20M/IMX183(C) 1"(13.06x8.76)	2.4x2.4	462mv with 1/30s 0.21mv with 1/30s	5@5440x3648		1x1, 2x2, 3x3	0.1ms~3600s
				10@4096x2160			
				15@2736x1824			
				30@1824 x1216			
A59.2225-20MMA	20M/IMX183(M) 1"(13.06x8.76)	2.4x2.4	388mv with 1/30s 0.21mv with 1/30s	17.8@5440x3648		1x1, 2x2, 3x3	0.1ms~3600s
				41@4096x2160			
				51@2736x1824			
				64@1824 x1216			
A59.2225-16MPA	16M/MN34230(C) 4/3"(17.60x13.30)	3.8x3.8	2413LSB 89.1LSB (Gain=0dB)	6@4648x3506		1x1, 2x2, 3x3	0.15ms~3600s
				20@2304x1750			
				48@1536x1168			
A59.2225-16MMA	16M/MN34230(M) 4/3"(17.60x13.30)	3.8x3.85	2560LSB 89.1 LSB (Gain=0dB)	22.5@4648x3506		1x1, 2x2, 3x3	0.15ms~3600s
				43@2304x1750			
				48@1536x1168			
A59.2225-10.3MA	10.3M/IMX294(C) 4/3"(17.47x12.86)	4.63x4.63	419mv with 1/30s 0.12mv with 1/30s	7.5@3704x2778		1x1, 2x2, 3x3	0.15ms~3600s
				8.5@4096x2160			
				30@2048x1080			
				60@1360x720			

## OTHER HARDWARE CONFIGURATION

Spectral Range	380-650nm (with IR-filter), for Monochromatic Camera, AR Is Used
White Balance	ROI White Balance/ Manual Temp-Tint Adjustment
Color Rendering Technique	Ultra Fine Color Engine
Capture/Control API	Native C/C++, C#, Directshow, Twain, Labview
Recording System	Still Picture and Movie
Cooling System*	Two-stage TE-cooling System -45 °C below Camera Body Temperature

## OPERATING ENVIRONMENT

Operating Temperature	-10°C~ 50°C
Storage Temperature	-20°C~ 60°C
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	DC 5V over PC USB Port External Power Adapter for Cooling System, DC12V,3A

## SOFTWARE ENVIRONMENT

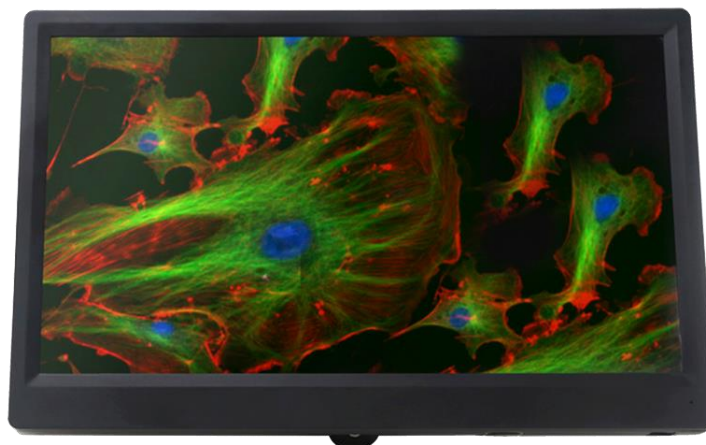
Operating System	Support Microsoft Windows XP / Vista / 7 / 8 / 10(32 & 64 bit) OS X (Mac OS X), Linux
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher Memory: 2GB or More USB port: USB2.0 High-speed Port Display: 17" or Larger CD-ROM



# A59.2259

## 11.6" HDMI Monitor

**OPTO-EDU**



11.6" Panasonic IPS LCD, 1920x1080P Contrast 1000:1  
Designed For A59.2220, A59.2221, A59.2222 Series HDMI Camera

Item No.	Active Area(Inch)	Video Fomat	Resolution	Contrast	Color(Million)	View Angle
A59.2259	11.6	HDMI	1080P	1000:01:00	16.7	IPS Full View
BASIC PERFORMANCE						
LCD Panel	Panasonic IPS LCD Screen(Super TFT)					
Input Video Format	HDMI					
Native Resolution	1920 x 1080					
Display Type	16:9 Ratio 11.6 Inch Active Matrix Super TFT LCD					
Typical Contrast Ratio	1000:01:00					
Colors	16.7 Million					
Viewing Angle(L/R/U/D)	IPS Full Vew					
Active Display Area	258mm(W) x 145mm(H)					
Pixel Pitch	0.134(W) X 0.134(H) mm					
Brightness	350 cd/ sq.m ;400cd sq.m / Optional					
Backlight	LED Backlight, 5000 hours					
OUTLINE PARAMETER						
Color	Black					
Dimension	281(L)*179(H)*15.6(W) mm					
Weight	400g					
OPERATING ENVIRONMENT						
Operating Temperature	-15 Degree~55 Degree					
Humidity Non Condensing	Operating:10%-90%, Storage: 5%-90%					
Synchronization Range	30-80 KHz Horizontal, 55-75 Hz Vertical					
Power Supply	AC110V-220V /DC12V(1A )					
Power Consumption	Max 12W					

# A59.2240

Auto Focus HDMI+WiFi+SD Camera, Mouse Control

OPTO-EDU



All-in-1 HDMI+WIFI+SD Card C-Mount Camera  
Auto/Manual Focus With The Movement of The Sensor  
Built-in Mouse Control Menu On HDMI Interface  
High Sensitivity CMOS Sensor, Ultra-Fine Color Engine, Perfect Color Reproduction  
Support Standard SDK For Windows/Linux/Mac (USB)



# Product Specification

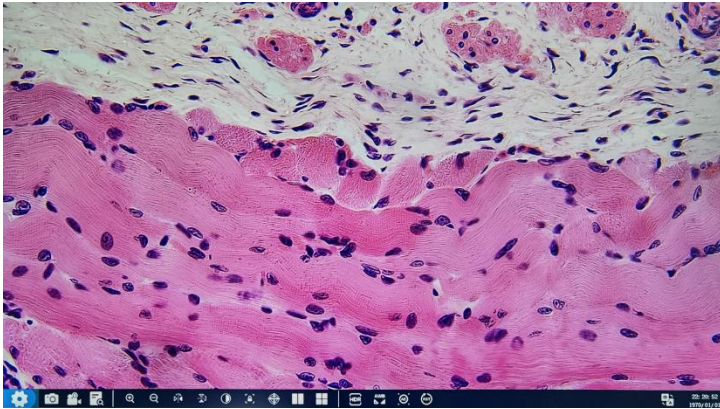
Item No.	A59.2240-5M	A59.2240-2M
Sensor & Size	1080P/5M/ Sony IMX178(C)	1080P/2M/ Sony IMX185(C)
	1/1.8"(6.22x4.67)	1/1.9"(7.20x4.05)
	Pixel(μm) 2.4x2.4	3.75x3.75
G Sensitivity	425 mv with 1/30s	1120 mv with 1/30s
Dark Signal	0.15 mv with 1/30s	0.15 mv with 1/30s
FPS/Resolution	60@1920x1080 (HDMI)	60@1920x1080 (HDMI)
	25@1920x1080 (WIFI)	25@1920x1080 (WIFI)
	Binning 1x1	1x1
Exposure	0.03ms~918ms	0.06ms~918ms
Interface & Button Functions		
USB	USB Camera or USB Mouse	
HDMI	HDMI Output	
DC12V	12V Power in	
SD	SD Card Slot	
ON/OFF	Power On/Off Switch	
LED	Power On Indicator	
Other Specification for HDMI Output		
UI Operation	With USB Mouse	
Image Capture	JPEG Format with 5M Resolution in SD Card(XFCAM1080PHB)	
	JPEG Format with 2M Resolution in SD Card(XFCAM1080PHD)	
Video Record	ASF Format 1080P 30fps in SD Card	
Camera Control Panel	Including Exposure, Gain, White Balance, Color	
	Adjustment, Sharpness and Denoising Control	
Toolbar	Including Zoom, Mirror, Comparison, Freeze,	
	Cross, Browser Function	
Other Specification for WIFI Output		
UI Operation	With USB Mouse to Operate on the embedded XCamView	
WIFI Performance	802.11n 150Mbps; RF Power 20dBm(Maximum)	
Maximum Connected Devices	3~6(According to the Environment and Connection Distance)	
White Balance	Auto White Balance	
Color Technique	Ultra-Fine Color Engine (WIFI)	
Capture/Control API	Standard SDK for Windows/Linux/Mac(WIFI)	
Recording System	Still Picture or Movie (WIFI)	
Software Environment (for USB2.0 Connection)		
Operating System	Microsoft® Windows® XP /Vista /7/8/8.1/10(32 & 64 bit)	
	OSx(Mac OS X)	
	Linux	
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher	
	Memory: 4GB or More	
	USB Port: USB2.0 High-speed Port	
	Display: 19" or Larger	
	CD-ROM	
Operating Environment		
Operating Temperature	-10~50(in Centidegree)	
Storage Temperature	-20~60(in Centidegree)	
Operating Humidity	30~80%RH	
Storage Humidity	10~60%RH	
Power Supply	DC 12V/2A Adaptor	
Overall Dimensions		
Width x Depth x Height	78 mm (3.07") x 70 mm (2.76") x 92mm (3.62")	
Shipping Weight	0.47 kg (1.0lbs)	



# A59.3507

## HDMI+Type-C, Mouse Control Measuring Digital Camera, 2.0M

OPTO-EDU



HDMI + Type C UVC + USB2.0 To U Disk Image Output Picture & Video  
2.0M Full HD Resolution 1920\*1080@60FPS For HDMI & USB Output  
UVC Real Time Image Output To PC With S-Eye Measure Software  
USB2.0 Mouse Control Menu On HDMI Interface Menu With Measure Function  
Type C DC5V/2A Power Supply By Adapter or Power Bank

### Product Specification

Items	A59.3507 HDMI+Type-C, Digital Camera, 2.0M
Sensor	Sony IMX307, 1/2.8" CMOS
Pixel size	2.9 $\mu$ m*2.9 $\mu$ m
Resolution	2.0M
FPS	Photo 1920*1080@60FPS, Video 1920*1080@30FPS
Exposure	Exposure Time 0-33MS, Auto/Manual Adjust, Support Target Brightness Setup
White Balance	Auto/Manual
Parameter	Set Contrast, Saturation, Gamma, Sharpness, Noise Reduction, Etc
Output	HDMI+Type-C
HDMI	Full HD 1080p@60FPS HDMI Output To Monitor, Control By USB2.0 Mouse: Move Mouse To Left & Bottom Edge Of HDMI Screen To Call Up The HDMI MAIN MENU & QUICK MENU, To Capture Photo, Video, Measure, Setting.
USB	1xUSB Connect To Mouse, 1xUSB Connect To U Disk To Store Photo & Video
Type C	Output From Type C Port To PC USB Port, S-Eye Measure Softwer For Win10 S-EYE Measure Software: Length: Straight Line Length, Broken Line Length, Curve Length, Parallel Line Distance, Point Line Distance, Line Length Geometry: Radius Circle, Two-point Circle, Three-point Circle, Concentric Circle, Radius Circle, Two-point Circle, Three-point Circle Geometric Area:Polygon, Square Remark: Point Coordinates, Crosshairs, Coordinate Systems, Text Notes
Language	Support Chinese,English,Deutsch, France, Janpanese
Power	Type C DC 12V/2A
Package	Size $\Phi$ 60x44.5mm Weight 0.2Kg

# A59.3508

WIFI+HDMI+Type-C+WAN, Digital Camera, 8.0M  
Mouse Control Measuring Digital Camera, 8.0M

OPTO-EDU



WIFI+ HDMI + Type C UVC + WAN Image Output Picture & Video  
8.0M Full HD Resolution 1920\*1080@60FPS For HDMI & USB Output  
UVC Real Time Image Output To PC With S-Eye Measure Software  
USB2.0 Mouse Control Menu On HDMI Interface Menu With Measure Function  
Type C DC5V/2A Power Supply By Adapter or Power Bank

## Product Specification

Items	A59.3508 WIFI+HDMI+Type-C+WAN, Digital Camera, 8.0M
Sensor	Sony IMX334, 1/1.8" CMOS
Pixel size	2.0 $\mu$ m*2.0 $\mu$ m
Resolution	8.0M
FPS	Photo 1920*1080@60FPS, Video 1920*1080@30FPS
Exposure	Exposure Time 0-33MS, Auto/Manual Adjust, Support Target Brightness Setup
White Balance	Auto/Manual
Parameter	Set Contrast, Saturation, Gamma, Sharpness, Noise Reduction, Etc
Output	WIFI+HDMI+Type-C+WAN
WIFI	WIFI Output Youngwin OS, Support Lo
HDMI	Full HD 1080p@60FPS HDMI Output To Monitor, Control By USB2.0 Mouse: Move Mouse To Left & Bottom Edge Of HDMI Screen To Call Up The HDMI MAIN MENU & QUICK MENU, To Capture Photo, Video, Measure, Setting.
USB	1xUSB Connect To Mouse, 1xUSB Connect To U Disk To Store Photo & Video
Type-C	Output From Type C Port To PC USB Port, S-Eye Measure Softwer For Win10 S-EYE Measure Software: Length: Straight Line Length, Broken Line Length, Curve Length, Parallel Line Distance, Point Line Distance, Line Length Geometry: Radius Circle, Two-point Circle, Three-point Circle, Concentric Circle, Radius Circle, Two-point Circle, Three-point Circle Geometric Area:Polygon, Square Remark: Point Coordinates, Crosshairs, Coordinate Systems, Text Notes
WAN	Output To Ethernet
Language	Support Chinese,English,Deutsch, France, Janpanese
Power	Type C DC 12V/2A
Package	Size 85*65*49mm Weight 0.2Kg



NEW

# A59.3509

9" LCD Digital Camera, USB2.0 + Mouse Measure, 5.0M

OPTO-EDU



9" LCD Screen High Resolution 1024\*600 Pixels  
5.0M Digital Camera 1/2.8" CMOS Sony Sensor  
USB2.0 Real Time Image Output + TF Card Storage  
USB Mouse Control Menu For Measure Function  
DC12V/2A, 100~240V Power Adapter

The screenshot displays the camera's software interface with a microscopic image of plant cells. On the left, a vertical toolbar contains icons for 'Take Photo', 'Record Video', 'Preview', 'Measure', and 'Setting'. On the right, a '测量' (Measurement) panel is active, showing a grid of icons and a detailed measurement window. The measurement window includes fields for '名称' (Name: 200mm:200px), '长度' (Length: 200), '像素' (Pixel: 200.000), and '比例' (Ratio: 1.000000). At the bottom, a horizontal toolbar contains icons for 'Zoom In', 'Zoom Out', 'Left/Right Mirror', 'Up/Dow Mirror', 'Black/White', 'HDR', 'Freeze', 'Net', 'Font', and '4 Split'. A scale bar at the bottom right indicates '100mm' and '1pixel = 1.000000mm'.



# Product Specification

Items	A59.3509 9" LCD Digital Camera, USB+Mouse Measure, 5.0M
Sensor	1/2.8" Sony Star Light Level CMOS Sensor
Resolution	5.0M CMOS
LCD Screen	9" LCD, Resolution 1024x600 High Clearance Screen
Output	USB 2.0 Type-A, TF Card
Pixel Size	2.0x2.0um
Power Supply	DC 12V/2A Power Adapter, Input 100-240V AC
Function	Photo, Video, Measure, Compare
	USB 2.0 To Win 7, Win10 System, Software S-Eye Included
	Brightness, Contrast, Exposure, White Balance Adjustable
	10x Digital Zoom, 4 Split/ 2 Split Windows Image Compae
	Storage To TF Card
	Cross Line With Scale, Calibrated
	Net Line 8 Kinds, Width & Color Adjustable
Size / Weight	Product Size 225x52x175mm, Net Weight 0.7Kg
Standard Package	LCD Camera, USB 2.0 Cable, Mouse, DC12V Power Adapter
USB Mouse Measure Operation	<p>1. Insert the mouse into the camera Type-A USB 2.0 port, connect 12V power supply to camera.</p> <p>2. Turn on the power switch, when the camera is running, the LED light turns blue</p> <p>3. Move the mouse to the top left corner of the screen to call up the <b>MAIN MENU</b>, including icon : Take Photo, Record Video, Preview, Measure, Setting.</p> <p>4. Move the mouse to the middle position at the bottom of the screen to call up the <b>QUICK MENU</b>, including icon: Zoom In, Zoom Out, Up/Dow Mirror, Left/Right Mirror, Black/White, HDR, Freeze, Net, Font, 2 Split, 4 Split</p> <p>5. Click the <b>MEASURE</b> icon to pop up the measure window, which support over 20 kinds of measurement graphics.</p> <p>6. Click the EDIT button and fill in the name to of new ruler to <b>CALIBRATE</b>. Move the mouse to the corresponding standard scale in the image display window and draw a standard length scale line. Then fill in the length column and click SAVE to complete the calibration setting. If you want to add more ruler, just repeat above steps.</p> <p>7.Click mm/PX to open or close the screen scale.</p>
Windows Measure Operation	<p>8. If the USB port is directly connected to the computer, the screen and the computer can be displayed synchronously (the USB cable must be connected to the computer before the device is powered on)</p> <p>9. S-EYE Measure Software: Length: Straight Line Length, Broken Line Length, Curve Length, Parallel Line Distance, Point Line Distance, Line Length Geometry: Radius Circle, Two-point Circle, Three-point Circle, Concentric Circle, Radius Circle, Two-point Circle, Three-point Circle Geometric Area:Polygon, Square Remark: Point Coordinates, Crosshairs, Coordinate Systems, Text Notes</p>

# A59.3520

## 9.7' Android Pad Digital Camera, 5.0M

HOT

OPTO-EDU

9.7" LCD, High Resolution 2048\*1536 Pixels  
5.0M 1/2.5" CMOS Digital Camera Built-in  
Android 5.1, CPU 4 Core 1.8G, RAM 2G ROM 8G  
HDMI+TF Card Output, Touch Screen USB Mouse Control  
Installed Measure Software, Chinese/English Manual



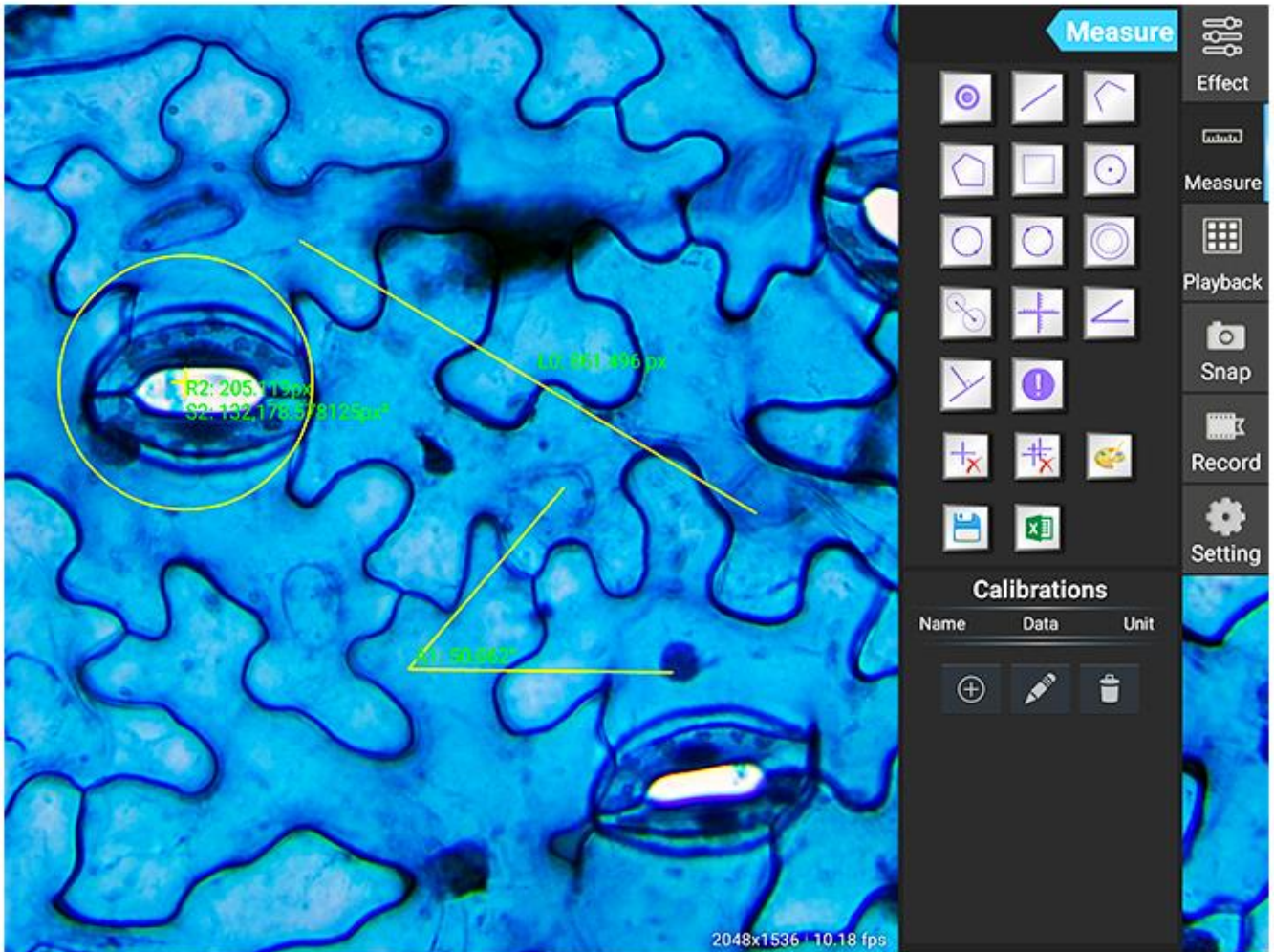
### A59.3520 9.7" LCD Pad Digital Camera

LCD	9.7" HD IPS Touch Screen With Backlight
Camera	5.0M 1/2.5" CMOS Digital Camera
Resolution	2048x1536 @15FPS
Pixel	2.2umx2.2um
Data Storage	TF Card or Built-in Memory
Data Output	USB2.0, HDMI, TF Card
Photo	5.0M .JPEG
Video	1080p Video Record
System	Android 5.1 System 90 Languages Support Mouse + Keyboard Control Support WIFI Support Bluetooth
Function	<b>S-Eye</b> Software & Instruction Manual Installed <b>Mark:</b> Point, Crosshair, Coordinate, Text <b>Length Measure:</b> Straight Line Length, Broken Line Length, Curve Length, Parallel Line Distance, Point To Line Distance <b>Distance Between 2 Circle Centers:</b> Radius Fixed Circle, Two-point Fixed Circle, Three-point Fixed Circle <b>Geometric Measure:</b> Line Segment Length, Radius Fixed Circle, Two-point Fixed Circle, Three-point Fixed Circle, Concentric Circle <b>Geometric Area Measure:</b> Polygon, Square
Power	DC 12V/2A Power Adaptor, AC 100~240V
Size	Pad 238x182x12mm, Camera 40x39mm
Package	Packing Box 10x24x29cm, 0.6Kg, 1 pc/Box

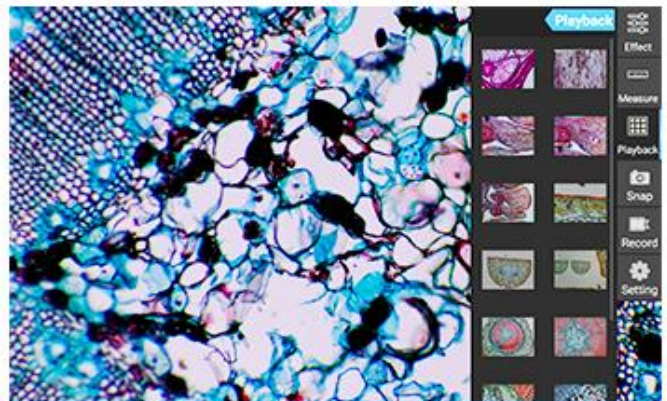


# Measuring Software Included

Touch Screen | Full Range Measure | 90 Languages



All Optical Parameter Adjustable!



Capture Photo & 1080p Video!



USB / HDMI / TF Card

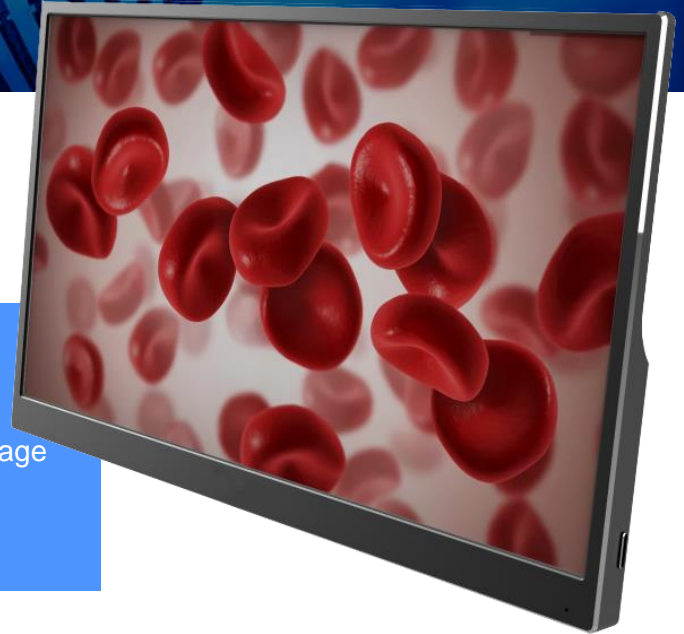


NEW

# A59.3550

## 11.6" LCD Digital Camera, HDMI+Mouse Measure, 5.0M

OPTO-EDU



11.6" LCD Screen High Resolution 1920\*1080 Pixels  
5.0M Digital Camera 1/2.8" CMOS Sony Sensor  
HDMI Real Time Image Output + USB Hard Disk Storage  
USB Mouse Control Menu For Measure Function  
DC12V/2A, 100~240V Power Adapter

**测量**

新增	删除	编辑
属性		
选项	画线标定 画圆标定	
名称	200mm:200px	
长度	200	mr
像素	200.000	px
比例	1.000000	mm/px

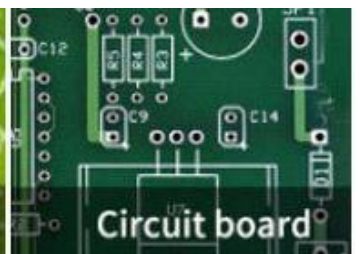
Zoom In    Left/Right Mirror    Black/White    Freeze    Font    4 Split

Zoom Out    Up/Dow Mirror    HDR    Net    2 Split

100mm  
1pixel = 1.000000 mm

# Product Specification

Items	A59.3550 11.6" LCD Digital Camera, HDMI+Mouse Measure, 5.0M
Sensor	1/2.8" Sony Star Light Level CMOS Sensor
Resolution	5.0M CMOS
LCD Screen	11.6" LCD, Resolution 1920x1080p High Clearance Screen
Output	HDMI, USB Hard Disk
Pixel Size	2.0x2.0um
Power Supply	DC 12V/2A Power Adapter, Input 100-240V AC
Function	Photo, Video, Measure, Compare
	Support <b>USB Mouse Control</b> To Capture Photo, Video, Measure, Setting
	Brightness, Contrast, Exposure, White Balance Adjustable
	Storage USB 2.0 Hard Disk
	Net Line 8 Kinds, Width & Color Adjustable
Size / Weight	Product Size 268x165x83mm, Net Weight 1.0kg
Standard Package	LCD Camera, DC12V Power Adapter
<b>USB Mouse Control</b> Operation Manual	1. Insert the mouse into the camera Type-A USB 2.0 port, connect 12V power supply to camera.
	2. Turn on the power switch, when the camera is running, the LED light turns blue
	3. Move the mouse to the top left corner of the screen to call up the <b>MAIN MENU</b> , including icon : Take Photo, Record Video, Preview, Measure, Setting.
	4. Move the mouse to the middle position at the bottom of the screen to call up the <b>QUICK MENU</b> , including icon: Zoom In, Zoom Out, Up/Dow Mirror, Left/Right Mirror, Black/White, HDR, Freeze, Net, Font, 2 Split, 4 Split
	5. Click the <b>MEASURE</b> icon to pop up the measure window, which support over 20 kinds of measurement graphics.
	6. Click the EDIT button and fill in the name to of new ruler to <b>CALIBRATE</b> . Move the mouse to the corresponding standard scale in the image display window and draw a standard length scale line. Then fill in the length column and click SAVE to complete the calibration setting. If you want to add more ruler, just repeat above steps.
	7. Click mm/PX to open or close the screen scale.





# A59.3551

## 11.6" Win10 Tablet Digital Camera, 5.0M

NEW

OPTO-EDU



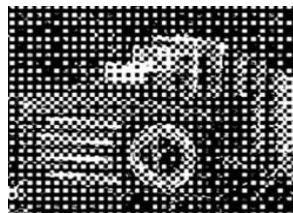
11.6" LCD Resolution 1920\*1080 Win10 Tablet 64 Bits  
16M Digital Camera 1/2.3" CMOS Sony Sensor  
2.4G/5G WIFI, Bluetooth, USB3.0, HDMI, Ethernet Port  
S-EYE Measure Software Installed  
Type C Power Supply DC12V/2A Adapter





# Product Specification

Items	A59.3551 11.6" Win10 Tablet Digital Camera, 5.0M
Sensor	1/2.3" Sony CMOS Sensor
Resolution	16M CMOS
LCD Screen	11.6" LCD, Resolution 1920x1080p IPS Screen
CPU	Inter J4105
System	Win10 64Bits
WIFI	2.4G/5G WIFI, 802.11a/b/g/n/ac
Bluetooth	Bluetooth 4.2
Output	USB3.0, HDMI, WIFI, Ethernet, Type-C Power Supply
Pixel Size	1.335x1.335um
Power Supply	DC 12V/2A Power Adapter, Input 100-240V AC
Function	Photo 16M, Video 1080p Full HD
	Adjust: Brightness, Contrast, Saturation, White Balance, Exposure, Flicker Suppression, Sharpness, Gamma, CB/Cr Gain
	UI Interface: Mouse Control, Touch Screen
	Storage Photo, Video, Preview, SD Card Format
Windows Measure	<p><b>S-EYE Measure Software:</b>  <b>Length:</b> Straight Line Length, Broken Line Length, Curve Length, Parallel Line Distance, Point Line Distance, Line Length  <b>Geometry:</b> Radius Circle, Two-point Circle, Three-point Circle, Concentric Circle, Radius Circle, Two-point Circle, Three-point Circle  <b>Geometric Area:</b> Polygon, Square  <b>Remark:</b> Point Coordinates, Crosshairs, Coordinate Systems, Text Notes</p>
Size / Weight	Product Size 285x177x12.5mm, Net Weight 0.9kg
Standard Package	LCD Camera, DC12V Power Adapter
Quick Manual	<ol style="list-style-type: none"> <li>1. First, connect the product to Type-C DC-12V power supply</li> <li>2. After connecting the power supply, press the power on button, and the blue light of the product will always be on.</li> <li>3. Double click the S-EYE Measure Software on the desktop of Window 10</li> <li>4. Click "Open Video Source" in S-EYE software, and choose camera YW1600</li> <li>6. Measure and adjust as you need.</li> </ol>



# A59.4231

## HDMI+USB+TF Digital Camera, 38.0M, USB Measure

OPTO-EDU



38M 1/2.3" CMOS Panasonic Sensor, Pixel Size 1.335x1.335 $\mu$ m  
Output HDMI(Type A), USB(Type B),TF Card  
Photo Resolution 38M, Video Resolution 2K@30fps  
USB2.0 Output (No Driver Need) At Same Time With Measuring Software,  
Cross Line 2 Lines With Scale, Sharpness, Contrast, Saturation Adjustable.

### A59.4231 2K HDMI Digital Camera, 60M

Sensor	1/2.3" Panasonic CMOS
Pixel Size	1.335 $\mu$ m $\times$ 1.335 $\mu$ m
Output	HDMI(Type A), USB(Type B), TF Card Output To USB + HDMI At Same Time
HDMI Photo Resolution	60MP (4:3), Default 38MP (4:3), Capture To TF Card
HDMI Video Resolution	2K@30FPS, 1080p@60FPS, Capture To TF Card
HDMI Control	Quick Control Buttons On Camera & IR Remote Controller HDMI Interface Menu Support English/Chinese
HDMI Photo Scale	Support 4:3, 16:9
USB Output	1920*1080@30FPS 2.0M 1280*720@30FPS, 1024*768@30FPS 640*480@30FPS (Driver Free)
TF Card	16G TF Card Included, Support Max 64GB
Exposure	Auto/Manual Adjustable
White Balance	Auto/Manual Adjustable
Color	RGB Adjustable Separately
Cross Line	8 Lines, Color, Width, Position Adjustable; 2 Lines With Scale 2 Lines With Dot, Color, Width, Position Adjustable;
Menu	Sharpness, Contrast, Saturation Adjustable
Mono Negative	Support

Mirror Image	Support Horizontal & Vertical Mirror
Language	Chinese/English
Digital Zoom	Support
IR Remote Controller	Remote Control To Take Photo, Video, Set Menu
Input	DC 12V (Support 5-19V), 55-21mm Socket
Power Consumption	Max 0.15W (12V,0.12A)
Adapter	C/CS Mount
Product Size	74*74*35mm
Product Weight	150g
Package Size	160*100*80mm
Package Weight	450g
Packaging list	Camera/Adapter/Remoter/USB Cable/HDMI Cable/ 16G TF Card/Instruction Manual



# A59.4235

HDMI+USB+TF Digital Camera, 60M, USB Measure

HOT

OPTO-EDU

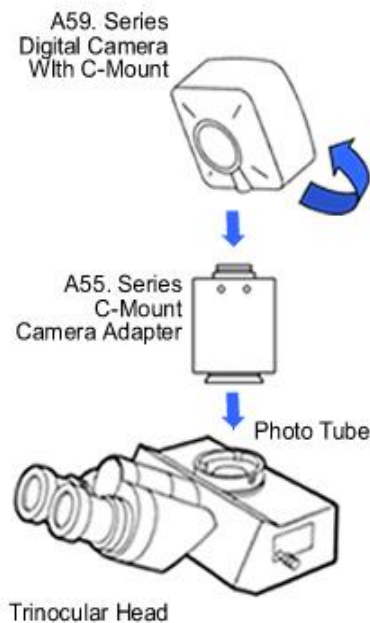


18M 1/2.3" CMOS Panasonic Sensor, Pixel Size 1.43x1.43 $\mu$ m  
HDMI+USB Output At Same Time, TF Card 16G  
HDMI Photo Resolution 60M, Video Resolution 2K@30fps  
USB2.0 Output Driver Free With Measuring Function Software  
Cross Line 2 Lines With Scale, Sharpness, Contrast, Saturation Adjustable.

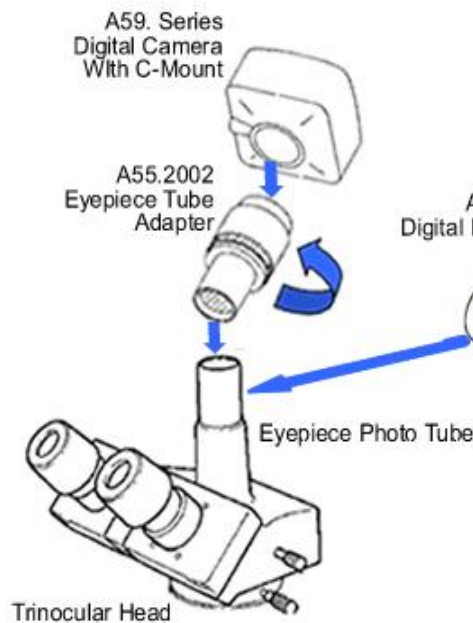
OPTO-EDU

## How Camera Connect To Microscope

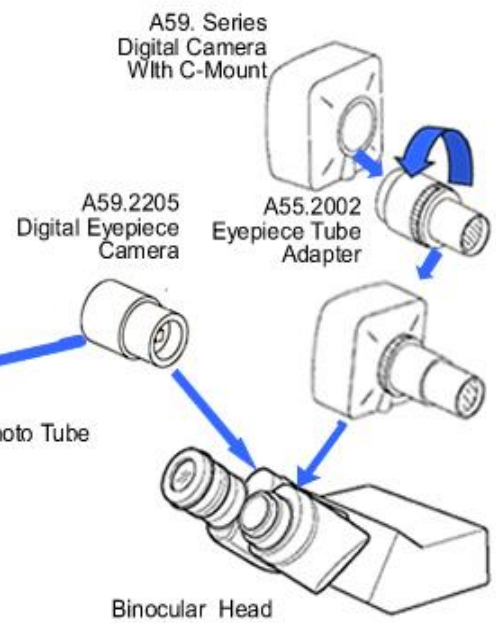
### 1. To Trinocular Microscope On Straight Photo Tube



### 2. To Trinocular Microscope On Eyepiece Photo Tube



### 3. To Binocular Microscope On Eyepiece Tube

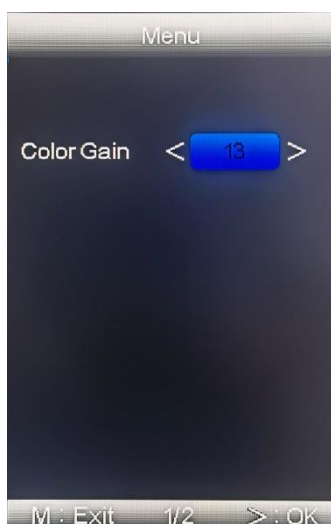


# Product Specification

## A59.4235 2K HDMI Digital Camera, 60M

Sensor	1/2.3" Panasonic CMOS
Pixel Size	1.335µm × 1.335µm
Output	HDMI(Type A), USB(Type B), TF Card Output To USB + HDMI At Same Time
HDMI Photo Resolution	60MP (4:3), Default 38MP (4:3), Capture To TF Card
HDMI Video Resolution	2K@30FPS, 1080p@60FPS, Capture To TF Card
HDMI Control	Quick Control Buttons On Camera & IR Remote Controller HDMI Interface Menu Support English/Chinese
HDMI Photo Scale	Support 4:3, 16:9
USB Output	1920*1080@30FPS 2.0M 1280*720@30FPS, 1024*768@30FPS 640*480@30FPS (Driver Free)
TF Card	16G TF Card Included, Support Max 64GB
Exposure	Auto/Manual Adjustable
White Balance	Auto/Manual Adjustable
Color	RGB Adjustable Separtely
Cross Line	8 Lines, Color, Width, Position Adjustable; 2 Lines With Scale 2 Lines With Dot, Color, Width, Position Adjustable;
Menu	Sharpness, Contrast, Saturation Adjustable
Mono Negative	Support
Mirror Image	Support Horizontal & Vertical Mirror
Language	Chinese/English
Digital Zoom	Support
IR Remote Controller	Remote Control To Take Photo, Video, Set Menu
Input	DC 12V (Support 5-19V), 55-21mm Socket
Power Consumption	Max 0.15W (12V,0.12A)
Adapter	C/CS Mount
Product Size	55*55*60mm
Product Weight	200g
Package Size	160*100*80mm
Package Weight	450g
Packaging list	Camera/Adapter/Remoter/USB Cable/HDMI Cable/ 16G TF Card/Instruction Manual

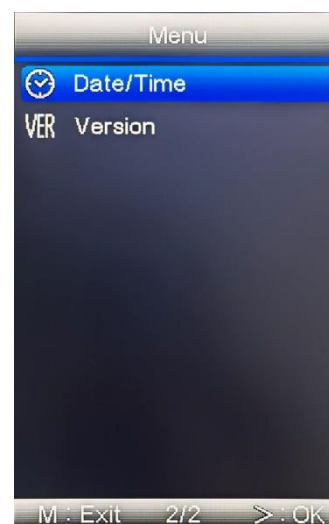
### ◆ Color Gain



### ◆ Record Audio



### ◆ Date/Time



# A59.4251

## 10.1" Win10 Tablet Digital Camera, 5.0M

**OPTO-EDU**



10.1" Windows Pad LCD Screen Resolution 1280\*800  
5.0M Built-in Digital Camera CMOS Sensor  
Win10 Tablet 4G+64G With Battery 5500mAh  
Support Blue Tooth, TF Card, HDMI, USB2.0, USB3.0, 5G Wifi, Hard Disk  
Mouse + Keyboard Control, With Measuring Software



### DIGITAL CAMERA

HDMI 1/2.5" Color CMOS, 2592x1944, 5.0M Full HD Preview And High Resolution Photo Capture



Adjustable Angle For Easy Observation



## Product Specification

Function	A59.4251 Camera Specification
Screen Size	1/2.5"
Effective Pixels	5 Million
Camera Resolution	2592*1944
Pixel Size	2.2μm*2.2μm
UI	Windows 10
Labeling Functions	Point Coordinates, Cross Lines, Text Notes
Length Masurement	Linear, Fold Line, Curve, Parallel Line Distance, Point Line Distance
Center Distance	Radius Fixed Circle, Two Point Fixed Circle, Three Point Fixed Circle
Geometrical Measurement	Line Segment Length, Radius Fixed Circle, Two Point Fixed Circle, Three Point Fixed Circle, Concentric Circle
Geometrical Area	Polygons, Squares
Photo/Video	Support
Power	DV-5V
Operating Temperature	-10°C+70°C
Humidity	10%~90%
Function	A59.4251 Pad Specification
Screen Size	10.1"
Screen Resolution	1280*800
CPU	Intel Z8350 CPU@1.44GHz High Speed 1.92GHz
HDD	4GB DDR+64GB ROM
System	Windows 10
Battery	5500MAH
WIFI	Support 5G WIFI
Bluetooth	Support
Interface Type	MicroUSB、 MicroHDMI、 Standard USB3.0
TF Card	Support Class10
Application Scensrios	
Biological Recognition	Portrait Detection, Fingerprint, Palmprint Recognition, Lris Detection, Etc
Defect Elimination	Test The Quality Of The Products
Accurate Measurement	Area Measurement, Three-coordinate Measurement, Three-dimensional Scanning, Stereo Vision Measurement, Etc
Tracking Identification	Qr Code, Commodity Code, Etc
Medical Reaearch	Pathological Imaging, Microscopic Imaging, Specimen Collection, Etc

# A59.3808

## USB2.0 CMOS Digital Camera

**OPTO-EDU**

USB 2.0 Output, With Professional Analysis Software  
 2.0M, 5.0M, 12.0M Pixels USB2.0 CMOS Sensor  
 Standard C-Mount For Using In Trinocular Photo Port  
 30 fps 2.0M, 22 fps 5.0M, 12 fps 12.0M  
 Support PC Win7, Win8, Win10 System



Model	2M	5M	12M
Sensor Model	Sony	Sony	Panasonic
Sensor Size	1/2.9"	1/2.8"	1/2.33"
Resolution	2MP, 1920x1080	5MP, 2560x1920	12MP, 4000x3000
Pixel Size	2.8 $\mu$ m $\times$ 2.8 $\mu$ m	2.0 $\mu$ m $\times$ 2.0 $\mu$ m	1.335 $\mu$ m $\times$ 1.335 $\mu$ m
Frame Rate	30fps	22fps	15fps
Color/Mono	Color		
Shutter Type	Rolling Shutter		
Exposure Mode	Auto/Manual		
Picture Format	TIFF/JPG/PNG/DICOM		
Operating System	Windows 7/8/10 (32 Bit/64 Bit)		
PC Software	Mosaic V2.0		
SDK	C/C++, C#, Directshow		
Optical Interface	C Mount		
Data Interface	USB2.0		
Operating Temperature	0-60°C		
Operating Humidity	10%-85%		
Camera Size	68X68X42.5(mm)		
Camera Weight	253g		

# A59.3811

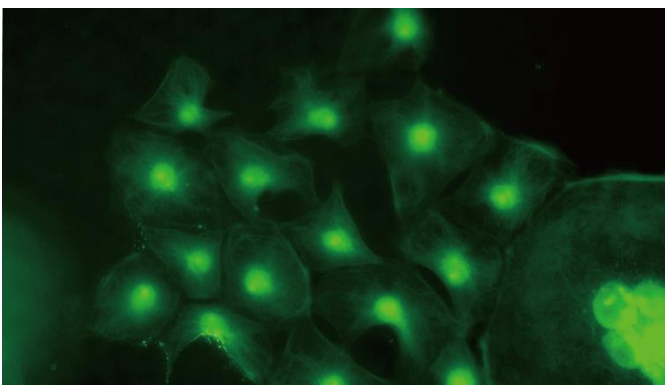
Auto Focus HDMI+USB+SD Digital Camera, 6.0M, Mouse Control

OPTO-EDU



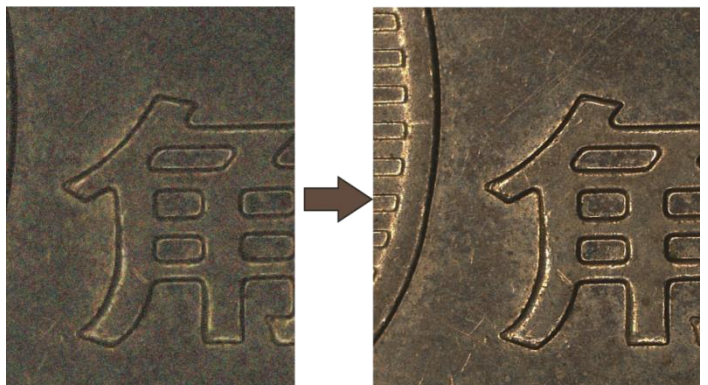
HDMI+USB2.0 Auto Focus Digital Camera  
6.0M Resolution 1/2.8" CMOS Sensor  
Mouse Control Menu & Measuring Under HDMI Interface  
HDMI+USB2.0+SD Card Data Output  
Standard C-Mount For Using In Trinocular Photo Port

## Sample Applications



### 3D Noise Reduction

The Powerful 3D Noise Reduction Function Can Effectively Reduce The Noise Caused By Prolonged Exposure Time And Keep The Picture Clean And Clear, And The Picture Quality Is More Extraordinary.



### Highly Intelligent

It Can Automatically Acquire Image Information, And Can Also Provide Ideal White Balance And Saturation Effects Under The Automatic Exposure Mode. Whether In Bright Field Or Dark Field, Almost No Manual Adjustment Skills Are Required To Obtain Stunning Images.



## Camera Specification

Sensor	CMOS	Sensor Size	1/2.8"
Dynamic Resolution	2MP, 1920x1080	Static Resolution	6MP, 3264x1836
Frame Rate	30fps @USB2.0 60fps @HDMI	Video Recording	30fps @PC 30fps @SD Card
Exposure Mode	Auto/Manual	Exposure Time	0.001s-10s
Output Interface	USB2.0,SD Card, HDMI	Setting	Gamma,Gain, WDR Noise Reduction,
White Balance	Auto/Manual	Optical Port	Standard C-Mount
Built-in Software	Cloud 1.0 Ver	PC Software	Capture V2.0
Size	90.7x78x70.8(mm) Weight 400(g)		
Compatible OS	Windows 7/8/10 (Real-time Image Stitching Needs To Run On A 64-bit System)		

## Retina Screen Features(Optional)

Resolution	1080P(1920x1080)	Display Type	IPS-Pro
Screen Size	11.6"	Aspect Ratio	16:09
Brightness	320cd/m2	Static Contrast Ratio	1000:01:00
HDMI Port	1	Power Supply Type	12V, 2A
Size	282.0x180.5x15.3(mm)	Weight	600(g)

## Capture V2.0 Feature Function

Modular Function Configuration

Intelligent 12-bit ISP Color Reproduction

Real-time Depth Of Field Fusion (option)

Real-time Image Stitching (option)

Real-time Fluorescence Image Synthesis And Editing

HDR Image Synthesis

Micro-imaging-based Intelligent Automatic Exposure

Intelligent Flat Field Correction Based On Dynamic Calculation

Supports Single Shot, Delayed Camera

Automatic Video And Delay Video Generation

Output Format Selection

User Parameter Group Save And Load

Dynamic \ Static Measurement

Layered Measurement

Customize Measuring Gauges, Layers, Precision

Customize Image Naming, Style, Save Location

Implements Drawing: Points, Lines, Rectangles, Polygons, Circles, Arcs, Angles

Data Export As Txt Or Excel

Report Generation And Printing

# A59.3815

HDMI+USB+SD Digital Camera, 5.0M, Mouse Measure

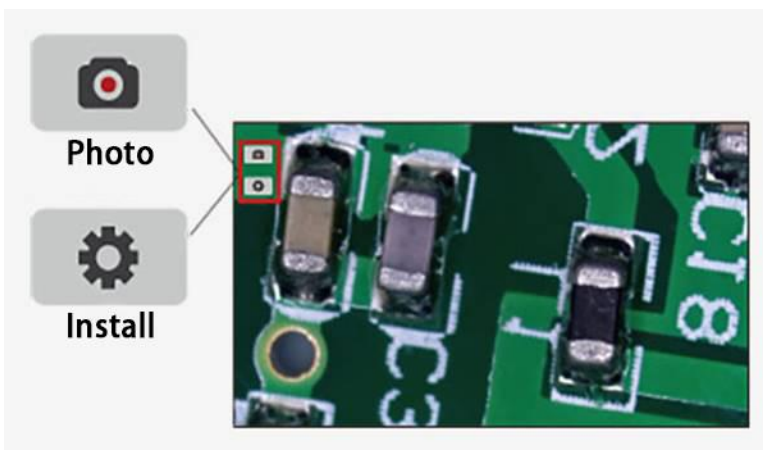
OPTO-EDU



HDMI+USB2.0 Output Digital Camera  
5.0M Resolution 1/2.5" CMOS Sensor  
Mouse Control Menu & Measuring Under HDMI Interface  
HDMI+USB2.0+SD Card Data Output  
Standard C-Mount For Using In Trinocular Photo Port

## Software With Only Two Buttons

Conveniently, In Fact, You Can Do It With One Click. The Start Screen Has Only Two Buttons, One For Taking Pictures And The Other For Entering The Setup Menu. It's As Simple As A Smartphone Iphone.



## 1080P Video

Click The Button To Shoot 1080p 15fps Video. The Video File Is Stored In A High-speed SD Card, And You Can Also Play It Back Directly.



## Camera Specification

Sensor	CMOS	Sensor Size	1/2.5"
Dynamic Resolution	5MP, 1920x1080	Static Resolution	5MP, 2592x1932
Frame Rate	15fps @USB2.0 15fps @HDMI	Video Recording	15fps @PC 15fps @SD Card
Exposure Mode	Auto/Manual	Exposure Time	0.002s-10s
Output Interface	USB2.0,SD Card, HDMI	Setting	White Balance, Exposure Time, Noise Reduction, Gain, Gamma, Wide Dynamic
White Balance	Auto/Manual	Optical Port	Standard C-Mount
Built-in Software	Cloud 1.0 Ver	PC Software	Mosaic V2.1
Size	90.7x78x70.8(mm) Weight 400(g)		
Compatible OS	WindowsXP Or Above, Mac		

## Retina Screen Features(Optional)

Resolution	1080P(1920x1080)	Display Type	IPS-Pro
Screen Size	11.6"	Aspect Ratio	16:09
Brightness	320cd/m2	Static Contrast Ratio	1000:01:00
HDMI Port	1	Power Supply Type	12V, 2A
Size	282.0x180.5x15.3(mm)	Weight	600(g)

## Capture V2.0 Feature Function

Modular Function Configuration

Intelligent 12-bit ISP Color Reproduction

Real-time Depth Of Field Fusion (option)

Real-time Image Stitching (option)

Real-time Fluorescence Image Synthesis And Editing

HDR Image Synthesis

Micro-imaging-based Intelligent Automatic Exposure

Intelligent Flat Field Correction Based On Dynamic Calculation

Supports Single Shot, Delayed Camera

Automatic Video And Delay Video Generation

Output Format Selection

User Parameter Group Save And Load

Dynamic \ Static Measurement

Layered Measurement

Customize Measuring Gauges, Layers, Precision

Customize Image Naming, Style, Save Location

Implements Drawing: Points, Lines, Rectangles, Polygons, Circles, Arcs, Angles

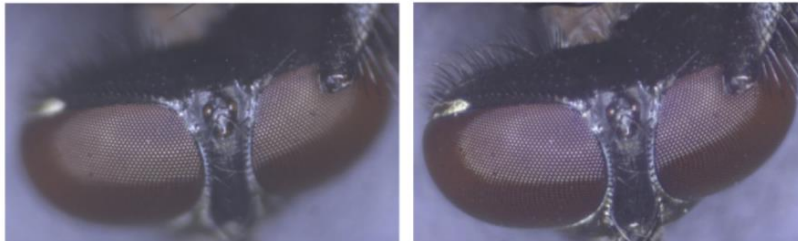
Data Export As Txt Or Excel

Report Generation And Printing



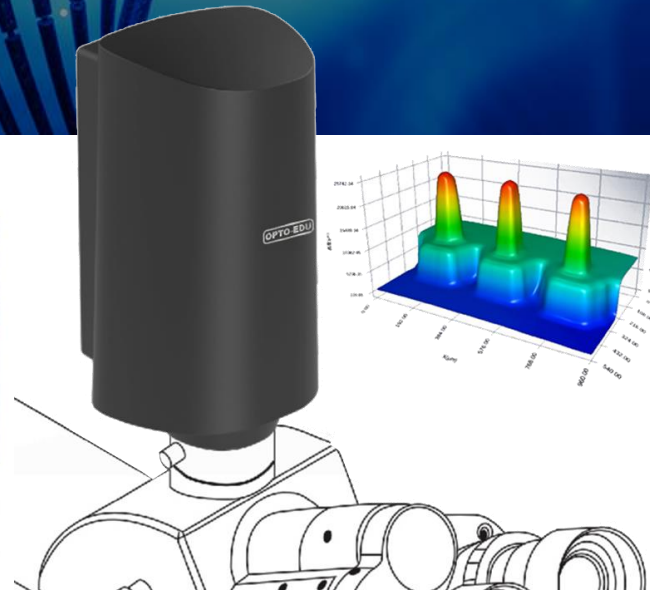
# A59.3820

## 3D Super EDF Auto-Focus Measuring HDMI Digital Camera



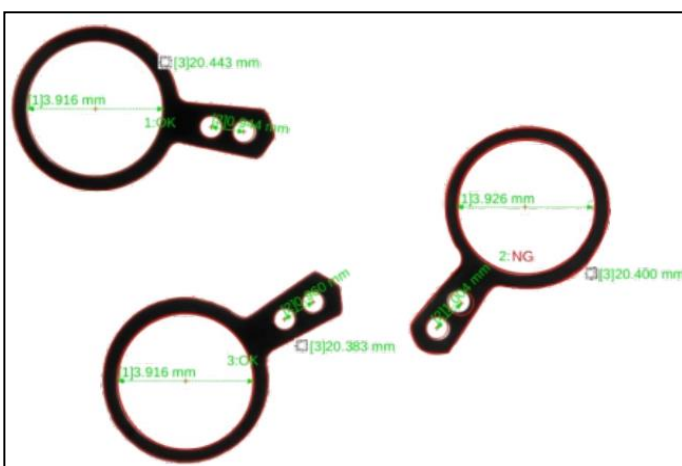
**Before EDF**  
Focus In Different Depth

**After EDF**  
Focus In All Depth



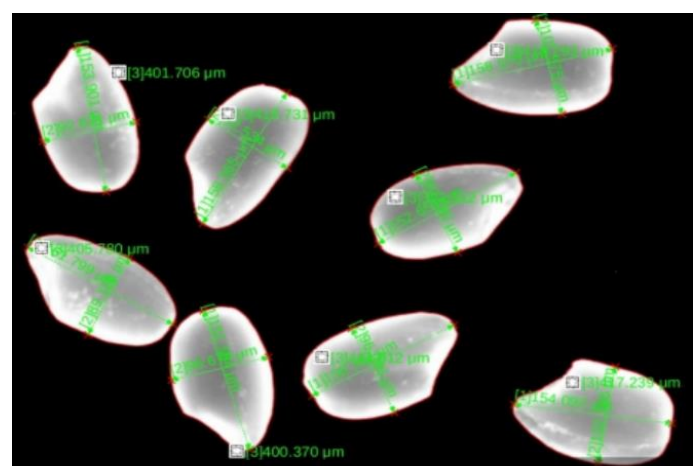
3D+2D Measure By Mouse & Keyboard Control Under HDMI Interface, No Need Computer  
Combine Dynamic Color Camera, Precise Z-axis Motorize Stage, PC & Software 4 in 1  
Super Extend Depth of Field (EDF) Auto Focus To View Different Height Points In One Picture  
One Key 3D Modeling, 2D Automatic Batch Measurement Eliminate Human Errors  
Standard C-Mount For Using With Biological, Metallurgical, Stereo Microscope

### Automatic Judge Qualified / Non-Qualified Parts



For standard parts, **A59.3820** can be customized according to the set standard deviation range. Dynamically display OK/NG results of samples to improve quality inspection and analysis efficiency.

### Output All Measurement Data At One Time



For non-standard parts, **A59.3820** can set similarity tolerance, output the measurement data of all samples at once to improve batch measurement efficiency.

# Product Specification

Model	A59.3820 3D Super EDF Auto-Focus HDMI Digital Camera	
Camera Features	Sensor	Sony 1/2"color CMOS
	Resolution	1080P(1920×1080)
	Pixel Size	3.75μm×3.75μm
	Shutter Mode	Rolling
	Scanning Method	Progressive scanning
	Frame Rate	60fps(Normal),30fps(WDR)
	Gain	Automatic / Manual
	Exposure Time	Automatic: 0.1ms-16.6ms, Manual: 0.0001s-1s
	White Balance	Automatic/Manual/Area
	Image Storage	TIFF/JPEG
	Video Format	AVI/MP4(1080P)
Advanced Features (Embedded)	3D Noise Reduction	Support
	WDR	Support
	Real-time EDF	Support
	Edge Enhancement	Support
	Gamma Correction (contrast)	Support
	Color Enhancement	Support
	Flat Field Correction	Support
	Effect Mode	Normal/Negative/Relief/Grayscale
3D Display & Measurement	Online Calibration	Support
	3D Display	Pseudo-color/Real Scene Display, Grid Lines, 360°rotation
	3D Histogram	Support
	3D Profile Measurement	Height Difference, Curvature, Area, Roughness
	3D Surface Measurement	Step Height, Volume, Surface Roughness
	Z Range (Depth of Field)	23000μm
	3D Measurement Accuracy (10X)	±2μm
	3D Repeatability (10X)	±1μm
	3D Measurement Report	Support, Editable Template
2D Measurement	2D Calibration Ruler	Support
	2D Manual Measurement	Point-point, Point-line, Line-line,Parallel, Perpendicular,
	Counter	Polygon, Circle, Arc, Concentric Circle, Circle-circle, Ang
	2D Measurement Accuracy (10X)	±2μm
	2D Repeatability (10X)	±2μm
	2D Measurement Report	Support
Input	Mouse Input	USB Mouse
	Keyboard Input	USB Keyboard
Interface	Optics	Standard C-Mount To Microscope Trinocular Head
	Video Output	HDMI 2.0 To Monitor Directly
	Internet Connection	Fast Ethernet
	USB Output/Input	USB2.0 x 3, USB3.0 x1, Save Image & Video To USB Disk, Connect To USB Mouse & Keyboard
Others	Storage capacity	Built-in 32G Emmc
	Power supply	DC 12V 8A
	Weight	2.5kg
	Appearance size (WxHxD)	87cm*181cm*103cm
	Working environment	5°C-40°C (temperature), 45%-85% (humidity)

# A59.4902

## HDMI+USB Digital Camera 3.5M, Manual Focus

**HOT**

**OPTO-EDU**



3.5M High Quality 1/3" CMOS Digital Camera  
HDMI & USB Dual Image Output, SD Card Built-in  
Unique Designed Manual Focusing Knob Enlarge Focusing Range  
C-Mount & Eyepiece Tube Adapter Connect All Microscopes  
Professional Analysis Software Support Measuring Function



High Quality 3.5M CMOS sensor  
HDMI & Mini USB Port



F Card Slot Max 64G Support Quick Image & Video Capture  
Certified By RoHs ,FCC, CE





# Product Specification



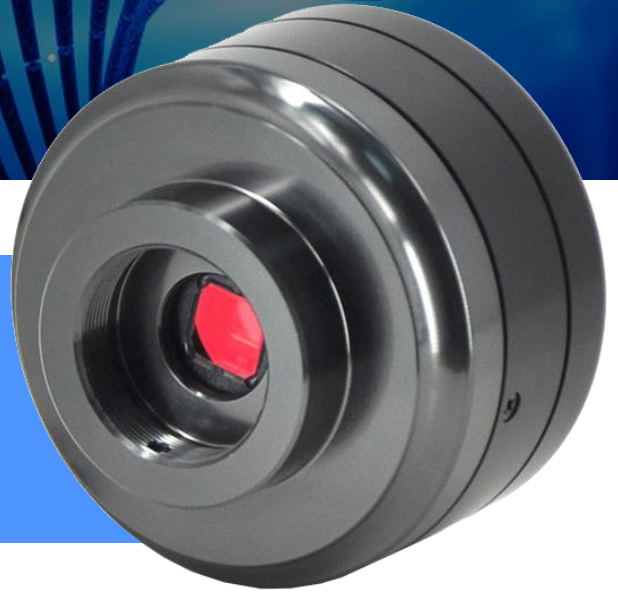
Hardware Configuration	
Imaging Sensor	Aptina AR0330 CMOS Sensor
Scan Mode	Scan line by line
The maximum resolution	2304 x 1535(3,538,944 pixels)
Sensor Optical Format	1/3" (5.07mm(H) x 3.38mm(V), Diagonal 6.09mm)
Pixel Size	2.2μm x 2.2μm
Dynamic Range	69.5dB
ADC	12-bit, 8-Bit R.G.B to PC
SNR(Signal Noise Ratio)	39dB
Spectral Characteristics	380-650nm
Video Mode Resolution	1080P@30FPS, 720P@30FPS,WVGA@30FPS
Snapshot Mode Resolution	2304x1536, 2304x1296, 1920x1080, 1280x720, 800x480
Exposure Capability	Real-time auto, Single auto, Manual adjustment
White Balance	Real-time auto, Single auto, Manual adjustment
Capture Modes	Picture
	Resolution: 1920x1080, 1280x720, 800x480
	Format: JPG
	Video
Record Route	Resolution: 2304x1536, 2304x1296, 1080P@30FPS, 720P@30FPS, WVGA@30FPS
	Format: MOV
	The local and TF card
Interface Parameter	
Camera Interface	C mount thread (1"x1/32) BFL: 11.6-36mm
Wired Picture Interface	HD Model: Mini HD
	USB Model: Micro USB
Charger Interface	Micro USB, DC5.0V 2A
Software Environment	
Operation System	Microsoft®Windows®XP/7/8/8.1/10(32&64 bit)
Computer Configuration	CPU: equal or more than the second generation Intel core 2.8GHz
	Memory: 2G or more
	USB port: USB2.0 high speed port or compatible port
	Displayer: Suggest 17 inches or larger
Operating Environment	
Operating Temperature	0°C~ 40°C
Storage Temperature	-20°C~ 60°C
Operating Humidity	30~60%RH
Storage Humidity	10~80%RH

# A59.4902-B

## HDMI+USB Digital Camera, 2.1M

**OPTO-EDU**

2.1M High Quality 1/2.8" CMOS Digital Camera  
HDMI & USB Dual Image Output, SD Card Built-in  
60 Fps Real Time Preview, 30Fps For Record  
C-Mount & Eyepiece Tube Adapter Connect All Microscopes  
Professional Analysis Software Support Measuring Function



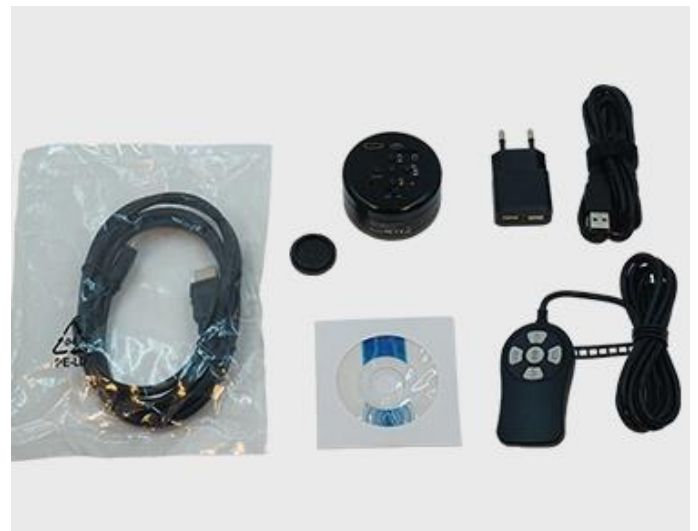
2.1MP Super Wide Dynamic CMOS Sensor



A59.4902-B Passed RoHs, FCC, CE Certificate



Extra Hard Industrial Metal Housing



A59.4902-B Standard Outfit With HDMI Cable, USB Cable, Power Adapter, Software CD, And Remote Wire Controller (Optional)

Hardware Configuration	
Imaging Sensor	SONY CMOS IMx291 super wide dynamic CMOS sensor
Expose Mode	Rolling shutter
The Maximum Resolution	2.1M 1920 x 1080(2,073,600 Pixels)
Sensor Optical Format	1/2.8" (6.058mm(H) x 4.415mm(V))
Pixel Size	2.9μm x 2.9μm
Dynamic Range	128dB
ADC	12-bit, 8-Bit R.G.B to PC
SNR Max	30dB
Spectral Characteristics	380-650nm
Exposure Capability	Real-time auto, Single auto, Manual adjustment
White Balance	Real-time auto, Single auto, Manual adjust R G B separately
HD Output Resolution	1920x1080P60, 1920x 1080P50, 1920x 1080P30, 1920x 1080P25, 1920x 1080I60, 1920x 1080I50, 1280x 720P60, 1280x 720P50, 640x 480P60(Auto adjust according to displayer)
Record Format	Snapshot Picture Format: JPG Resolution: 1920x 1080
	Record Video Format: MOV Resolution: 1920x 1080P30, 1280x 720P120, 1280x 720P60
Record Route	TF Card(Maximum support 128G, support hot plug )
Interface Parameter	
Camera Interface	C mount thread (1"x1/32)
Wired Picture Interface	HD TYPE C Mini HD
Charger Interface	Micro USB, DC5.0V (Maximum current 1A)
Software Environment	
Displayer	Recommend 16:9, at least 1080P HD displayer
Operating Environment	
Operating Temperature	0°C~ 40°C
Storage Temperature	-20°C~ 60°C
Operating Humidity	30~60%RH
Storage Humidity	10~80%RH





# A59.4910

## USB2.0 CMOS Digital Camera, 5.0M

HOT

OPTO-EDU

5.0M USB2.0 1/2.5" CMOS Digital Camera  
Real Time Preview, Image/Video Capture  
Professional Measuring & Analysis Software  
Support Windows, Mac, Linux System  
C-Mount, Eyepiece Tube Adapter To Use With All Microscopes



**A59.4910**  
with standard C-Mount



**A59.4910-M05**  
with standard C-Mount and  
0.5x eyepiece tube adapter set  
(for eyepiece tube dia.23.2mm,30.0mm,30.5mm)

# Product Specification

- A closed structure with color filter built-in, preventing dust from CMOS sensor.
- Designed with commonly used tripod mount 1/4-20A for widely use.
- Reliable electronic double plates design to resolve over heat problem after long working time.
- 5V DC power supply from USB port no need additional power adapter.
- 3 Years Quality Warranty!

## A59.4910 Hardware Configuration

Image Sensor	Color
Expose	Rolling Shutter
Maximum Resolution	2592x1944(5,038,848 Pixels)
Sensor Optical Format	1/2.5" (5.70mm(H) x 4.28mm(V), Diagonal 7.13mm)
Pixel Size	2.2μm x 2.2μm(BSI)
Dynamic Range	74.3 dB Linear, More Than 96 dB (Interleaved)
SNRmax	40dB
Spectral Charatristics	380-650nm
Exposure Capability	3.9ms-320ms, Automatic And Manual
White Balance	Automatic And Manual
Preview Modes	30FPS @2592X1944, 30FPS @1920X1080 30FPS @800X600, 640X480
Record Format	Snapshot Picture Format: JPG, BMP, PNG, TIFF, PDF Resolution: 2592x1944, 1920x1080, 800x600, 640x480 Record Video Format: MJPG Format AVI File Resolution: 1920x1080, 800x600, 640x480

## Software Environment

Windows System Demand	Microsoft®Windows® XP/7/8/8.1/10 (32&64 Bit)
	CPU: Equal Or More Than The Second Generation Intel Core 2.8GHz
	Memory: 2G Or More
	USB Port: USB 2.0 High Speed Port Or Compatible Port
	Displayer: Suggest 17 Inches Or Larger

## Operating Environment

Operating Temperature	0°C-40°C
Storage Temperature	-20°C-60°C
Operating Humidity	30-80%RH
Storage Humidity	10-60%RH
Power Supply	Direcct-Current 5V, Supply By USB Port

# A59.4920

USB2.0 CMOS Digital Camera, 5.0M @30Fps

**OPTO-EDU**



5.0M CMOS High Speed 30Fps Digital Camera  
1/2.5" High Quality CMOS Sensor Excellent Color Restoration  
USB 2.0 Data Output Support Computer Win7, Win10, iMac  
C-Mount & Eyepiece Tube Adapter Optional  
Professional Analysis Software Support Measuring Function

## A59.4920 Hardware Configuration

Image Sensor	Color
Expose	Rolling Shutter
Maximum Resolution	2592x1944(5,038,848 Pixels)
Sensor Optical Format	1/2.5" (5.70mm(H) x 4.28mm(V), Diagonal 7.13mm)
Pixel Size	2.2 $\mu$ m x 2.2 $\mu$ m(BSI)
Dynamic Range	74.3 dB Linear, More Than 96 dB (Interleaved)
SNRmax	40dB
Spectral Charatristics	380-650nm
Exposure Capability	3.9ms-320ms, Automatic And Manual
White Balance	Automatic And Manual
Preview Modes	<b>30FPS</b> @2592X1944, 1920X1080,1024x768,640X480
Record Format	Snapshot Picture Format: JPG, BMP, PNG, TIFF, PDF Resolution: 2592x1944, 1920x1080, 1024x768, 640x480 Record Video Format: MJPG Format AVI File Resolution: 1920x1080, 1024x768, 640x480

## Software Environment

Windows System Demand	Microsoft®Windows® XP/7/8/8.1/10 (32&64 Bit)
	CPU: Equal Or More Than The Second Generation Intel Core 2.8GHz
	Memory: 2G Or More
	USB Port: USB 2.0 Or Compatible Port
	Displayer: Suggest 17 Inches Or Larger

## Operating Environment

Operating Temperature	0°C-40°C
Storage Temperature	-20°C-60°C
Operating Humidity	30-80%RH
Storage Humidity	10-60%RH
Power Supply	Direcct-Current 5V, Supply By USB Port



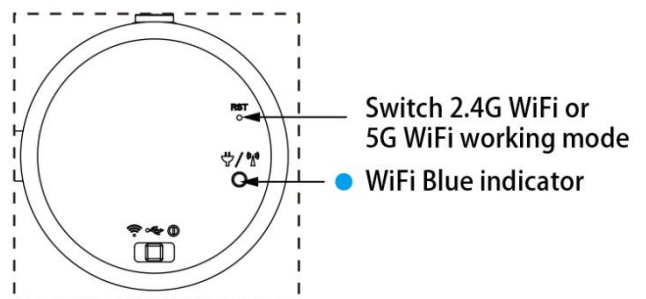
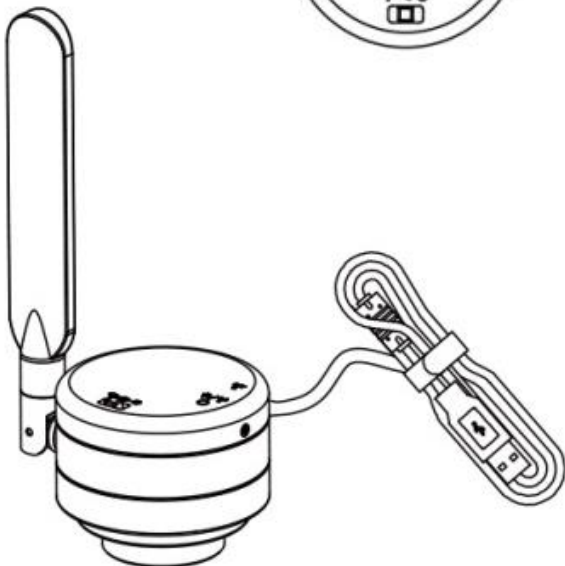
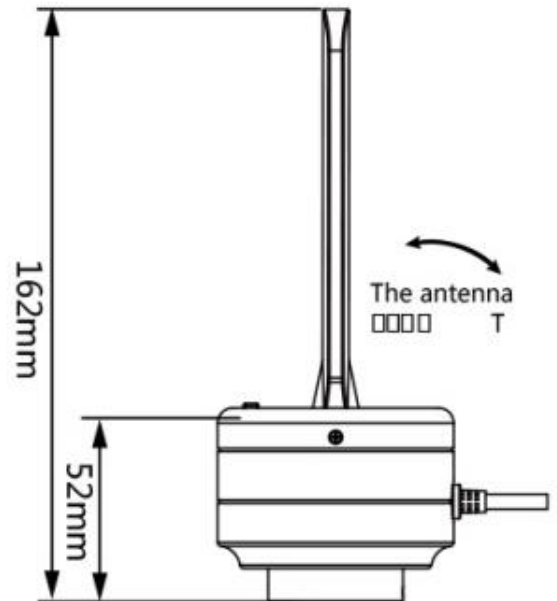
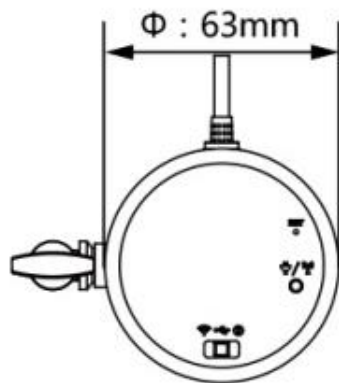
# A59.4920-W

5G WIFI+USB Digital Camera, 5.0M, 30Fps, Win,Android,iOS

OPTO-EDU



5G WIFI 5.0M CMOS High Speed 30Fps Digital Camera  
1/2.5" High Quality CMOS Sensor Excellent Color Restoration  
5G WIFI & USB 2.0 Data Output Support Computer Win7, Win10, iMac  
C-Mount & Eyepiece Tube Adapter Optional  
Professional Analysis Software Support Measuring Function



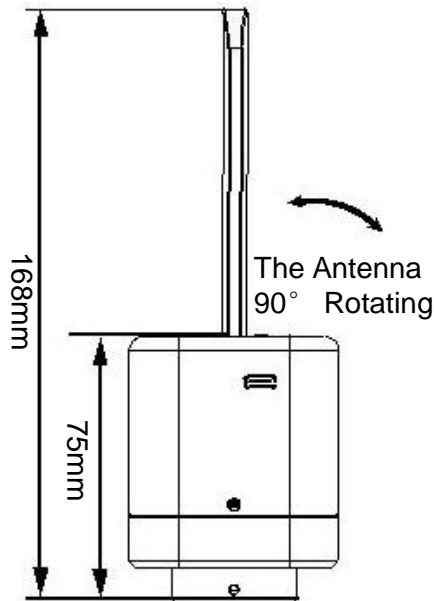
# Product Specification

A59.4920-W Hardware Configuration	
Image Sensor	APTINA AR0521 CMOS (Colorful)
Expose Mode	Rolling Shutter
Maximum Resolution	2592x1944(5,038,848 Pixels)
Sensor Optical Format	1/2.5"
Pixel Size	2.2µm x 2.2µm
Dynamic Range	74.3 dB Linear, More Than 96 dB (Interleaved)
SNRmax	40dB
Spectral Charatristics	380-650nm
Exposure Capability	3.9ms-320ms, Automatic And Manual
White Balance	Real-time Auto, Single Auto, Manual Adjustment
Preview Modes	USB mode:30FPS @2592X1944,1920X1080,1024X768, 640X480 WiFi mode:30FPS @2592X1944,1920X1080,1024X768, 640X480
Record Format	Snapshot Picture Format: JPG, BMP, PNG, TIFF, PDF Resolution: 2592x1944, 1920x1080, 1024x768, 640x480 Record Video Format: MJPG Format AVI File Resolution: 1920x1080, 1024x768, 640x480
Micro USB Interface	Wired: USB2.0 DC 5.0V 500mA Wireless: USB2.0 DC 5.0V 1500mA
Camera Interface	C Port
Wireless Parameter	
Standard	2.4G:IEEE 802.11n
	5G:IEEE 802.11ac
Operating Frequency Range	2.4G:2.400-2.4835GHz
	5G:5.180-5.825GHz
Software Environment	
Windows System Demand	Microsoft®Windows® XP/7/8/8.1/10 (32&64 Bit)
	CPU: Dual-core 3.0 GHz Or More CPU
	Memory: 4G Or More
	At Least 10GB Available Hard Disk Space
iOS System Demand	Wireless Network Card (Support IEEE 802.11n/ac)
	iPhone X/ 8/ 8 Plus/7/ 7 Plus/6s/6s Plus/ 6/6 Plus iPad Pro (12.9-inch 2nd generation)/ (12.9-inch 1st generation) / (10.5-inch) / (9.7-inch) iPad Air 2/iPad mini 4
	iOS11.0 or higher
Android system demand	Android5.0 or higher
	CPU: dual-core 1.7GHz or higher
	RAM memory: 1G or more
	Storage ROM: Suggest 8G or Larger
In The Wireless Working Status, You Can Switch To 2.4G WiFi Or 5G WiFi Mode. Please Confirm That The Hardware Of The Smart Device Supports IEEE802.11ac/n Protocol; Otherwise, Images Cannot Be Obtained Normally In 5G WiFi Mode.	

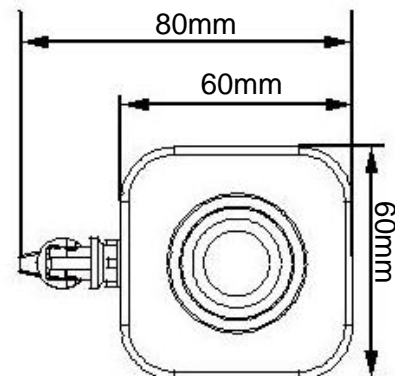
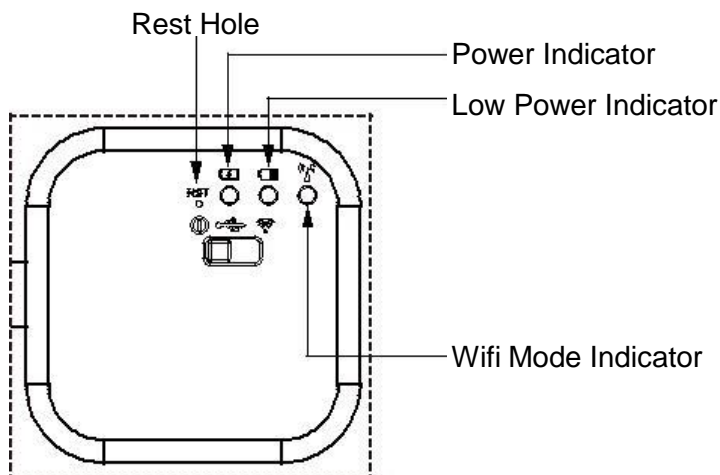
# A59.4920-W2

5G WIFI+USB Digital Camera, Rechargeable, 5.0M, 30Fps, Win,Android,iOS

OPTO-EDU



5G WIFI 5.0M CMOS High Speed 30Fps Digital Camera  
1/2.5" High Quality CMOS Sensor Excellent Color Restoration  
5G WIFI & USB 2.0 Data Output Support Computer Win7, Win10, iMacitchable By User  
Built-in Rechargeable Battery, Type C Charging Port  
Professional Analysis Software Support Measuring Function





# Product Specification

Hardware configuration	
Image Sensor	OnSemi AR0521
Expose mode	Rolling shutter
Maximum Resolution	2592 x 1944 (5,038,848 pixels)
Sensor Optical Format	1/2.5"
Pixel Size	2.2µm x 2.2µm
Dynamic Range	74.3 dB Linear, more than 96 dB (Interleaved)
SNRmax	40dB
Spectral Characteristics	380-650nm
Exposure Capability	3.9ms - 320ms, Automatic and manual
White Balance	Real-time auto, Single auto, Manual adjustment
Maximum Transmission Frame Rate	USB mode: 30FPS@2592x1944, 1920x1080, 1024x768, 640x480 WiFi mode: 30FPS@2592x1944, 1920x1080, 1024x768, 640x480
Record format	Snapshot Picture Format: JPG,BMP,PNG,TIFF,PDF Resolution: 2592x1944, 1920x1080, 1024x768, 640x480 Record Video Format: MJPG format AVI file Resolution: 1920x1080, 1024x768, 640x480
Power Consumption	Wired: USB2.0 DC 5.0V 500mA Wireless: USB2.0 DC 5.0V 1500mA
Camera Interface	C Port
Wireless Parameter	
Standard	IEEE 802.11ac
Operating Frequency Range	5.180-5.825GHz
Software Environment	
Windows system demand	Microsoft® Windows® XP / 7 / 8 / 8.1 / 10 (32 & 64 bit)
	CPU: i7 eight generation quad core or higher
	Memory: 8G or above
	Hard disk: at least 50 GB free space
	GPU: standalone graphics card (NVIDIA GPU)
iOS System Demand	Wireless network card (must support IEEE 802.11ac)
	iPhone 11 Pro/11 Pro Max/11
	iPhone X / XS / XS Max / XR
	iPhone 8/ 8 Plus
	iPhone 7 / 7 Plus
Android system demand	iPhone 6s / 6s Plus / 6 / 6 Plus / SE
	iPhone X/ 8/ 8 Plus/7/ 7 Plus/6s/6s Plus/ 6/6 Plus iPad Pro (12.9-inch 2nd generation)/ (12.9-inch 1st generation) / (10.5-inch) / (9.7-inch)
	iPad Air 2/iPad mini 4 and other new devices that support the 5G WiFi (11ac) protocol
	iOS11.0 or higher
	Android5.0 or higher
Android system demand	CPU: dual-core 1.7GHz or higher
	RAM memory: 3G or more
	Storage ROM: 8G or more recommended
	Support 5G WiFi (11ac) protocol

# A59.4924

## 4K USB2.0 CMOS Digital Camera, 8.0M+30fps

**OPTO-EDU**



4K 8.0M CMOS High Speed 30Fps Digital Camera  
1/1.8" High Quality CMOS Sensor Excellent Color Restoration  
USB 2.0 Data Output Support Computer Win7, Win10, iMac  
Biological/Stereo Modes, LED/Halogen Modes Switchable By User  
Professional Analysis Software Support Measuring Function

### Camera Dimensions

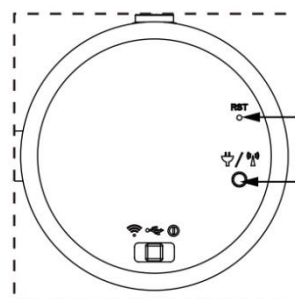
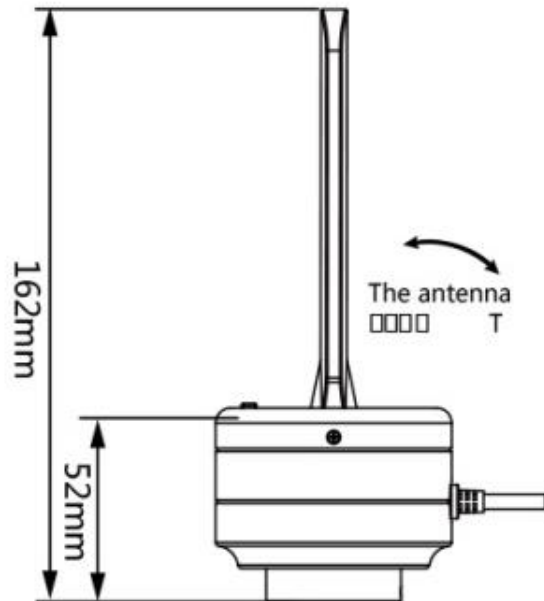
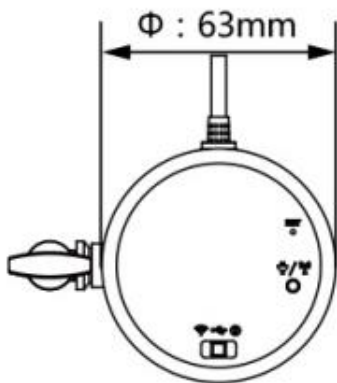
Hardware Parameters	
Image Sensor	Sony IMX334 CMOS Sensor
Expose Mode	Rolling Shutter
Maximum Resolution	3840x2160 (8,294,400 Pixels)
Sensor Optical Format	1/1.8"
Pixel Size	2.0µm x 2.0µm
Dynamic Range	72db(Non-HDR Mode)
SNRMax	<0.64lx
Spectral Characteristics	380-650nm
Exposure Capability	Automatic And Manual
White Balance	Automatic And Manual
Preview Modes	30FPS@3840x2160,2592x1944,1920x1080,1024x768,640x480
Record Format	Snapshot Picture Format: JPG,BMP,PNG,TIFF,PDF Resolution: 3840x2160 ,2592x1944,1920x1080,1024x768,640x480 Record Video Format: MJPG Format AVI File Resolution: 3840x2160 ,2592x1944,1920x1080,1024x768,640x480
Software Environment	
Windows System Demand	Microsoft® Windows® XP / 7 / 8 /8.1/10(32 & 64 bit) CPU: Equal Or More Than The Second Generation Intel Core 2.8GHz Memory: 2G Or More USB Port: USB2.0 Or Compatible Port Displayer: Suggest 17 Inches Or Larger
Operating Environment	
Operating Temperature	0°C-40°C
Storage Temperature	-20°C-60°C
Operating Humidity	30-80%RH
Storage Humidity	10-60%RH
Power Supply	Direct-current 5V, Supply By USB Port

# A59.4924-W

4K 5G WIFI+USB Digital Camera, 8.0M, 30fps

OPTO-EDU

4K 5G WIFI 8.0M CMOS High Speed 30Fps Digital Camera  
1/1.8" High Quality CMOS Sensor Excellent Color Restoration  
5G WIFI & USB 2.0 Data Output Support Computer Win7, Win10, iMac  
Biological/Stereo Modes, LED/Halogen Modes Switchable By User  
Professional Analysis Software Support Measuring Function



Switch 2.4G WiFi or  
5G WiFi working mode  
● WiFi Blue indicator



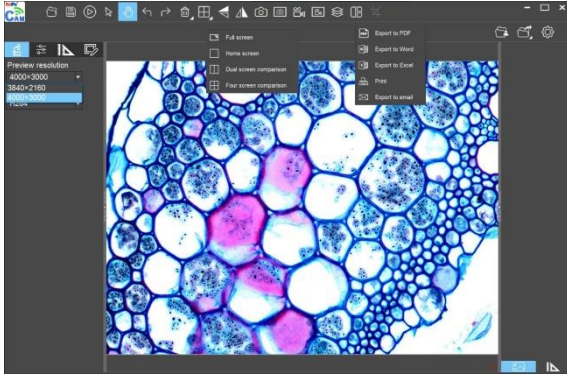
# Product Specification

Hardware Parameters	
Image Sensor	Sony IMX334 CMOS Sensor
Expose Mode	Rolling Shutter
Maximum Resolution	3840x2160 (8,294,400 Pixels)
Sensor Optical Format	1/1.8"
Pixel Size	2.0µm x 2.0µm
Dynamic Range	72db(Non-HDR Mode)
SNRMax	<0.64lx
Spectral Characteristics	380-650nm
Exposure Capability	3.9ms - 320ms, Automatic And Manual
White Balance	Real-time Auto, Single Auto, Manual Adjustment
Maximum Transmission Frame Rate	USB Mode: 30FPS@3840x2160,2592x1944,1920x1080,1024x768,640x480 WiFi Mode: 30FPS@3840x2160,2592x1944,1920x1080,1024x768,640x480
Record Format	Snapshot Picture Format: JPG,BMP,PNG,TIFF,PDF Resolution: 3840x2160 ,2592x1944,1920x1080,1024x768,640x480 Record Video Format: MJPG Format AVI File Resolution: 1920x1080,1024x768,640x480
Power Consumption	Wired: USB2.0 DC 5.0V 500mA Wireless: USB2.0 DC 5.0V 1500mA
Camera Interface	C Port
Wireless Parameter	
Standard	IEEE 802.11ac
Operating Frequency Range	5.180-5.825GHz
Software Environment	
Windows System Demand	Microsoft® Windows® XP / 7 / 8 /8.1/10(32 & 64 bit)
	CPU: Dual-core 3.0GHz Or More CPU
	Memory: 4G Or More
	At Least 10 GB Available Hard Disk Space
iOS System Demand	Wireless Network Card(Support IEEE 802.11ac)
	iPhone X/ 8/ 8 Plus/7/ 7 Plus/6s/6s Plus/ 6/6 Plus iPad Pro (12.9-inch 2nd Generation)/ (12.9-inch 1st Generation) / (10.5-inch) / (9.7-inch) iPad Air 2/iPad Mini 4
	iOS11.0 or Higher
Android System Demand	Android5.0 Or Higher
	CPU: Dual-core 1.7GHz Or Higher
	RAM Memory: 1G Or More
	Storage ROM: Suggest 8G Or Larger
In The Wireless Working Status, Please Confirm That The Hardware Of The Smart Device Supports IEEE802.11ac Protocol; Otherwise, Images Cannot Be Obtained Normally In 5G WiFi Mode.	

# A59.4972

## 9" LCD Digital Camera, USB2.0 +Mouse Measure, 5.0M

**OPTO-EDU**



8K 5G WIFI+HDMI+USB+WAN 12.0M High Speed 30Fps Digital Camera  
1/2.3" High Quality CMOS Sensor Excellent Color Restoration  
5G WIFI & USB 2.0 Data Output Support Computer Win7, Win10, iMac  
Perfectly Compatible With Three Main Systems of Windows, iOS And Android.  
Professional Analysis Software Support Measuring, Image Sticking, Field Of View Extend

## Product Specification

### A59.4972 8K 5G WIFI+HDMI+USB+Ethernet Digital Camera, 12.0M

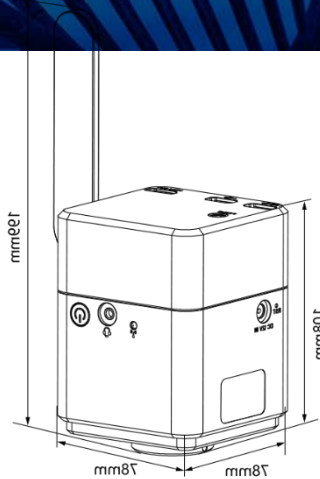
Output	USB Output, PC Software HDMI Output 5G WIFI Output, App Software Ethernet Output, WAN Port
Physical Pixel	12.0MP
Sensor Model	Sony IMX412 CMOS
Exposure Mode	Roller Shutter Exposure
Highest Resolution	8K, 4000x 3000 (12.000.000)
Sensor Size	1/2.3"
Pixel Size	1.55 $\mu$ m $\times$ 1.55 $\mu$ m
Spectral Response	380-650nm, For Fluorescent, Dark Field Image
Exposure	Automatic And Manual
White Balance	Real-time Auto, Manual Adjustment
Record Format	Snapshot Format: JPG Resolution: 4000 $\times$ 3000,3840 $\times$ 2160 Record Format: MP4 file Resolution: 1920 $\times$ 1080@60FPS
Power Consumption	DC 5V 2A
HDMI Output Resolution	Auto-adaptive Display, Up To 3840 $\times$ 2160P30
Supporting Protocol	5G WiFi IEEE 802.11ac
Working Frequency	5.180-5.825GHz

NEW

# A59.4974

## 4K 5G WIFI+HDMI+USB Disk Digital Camera, 12.0M, C-Mount, HDMI Measuring

OPTO-EDU

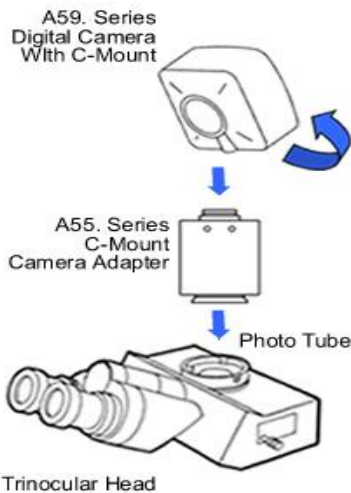


12M 4K HDMI+5G WIFI+USB Disk High Speed 30Fps Digital Camera  
 No Need Computer, HDMI Interface With Built-in Operation Measure System & Office For Report Create Directly  
 Built-in 32G Memory + USB 3.0 To USB Disk Storage, Control By USB 2.0 Mouse & Keyboard  
 5G WIFI Image Output System Perfectly Compatible With Three Main Systems of Windows, iOS And Android.  
 Built-in 10+ Viewing Mode Perfectly Support Biological/Stereo/BF/DF/PL/PH/FL/DIC Etc.

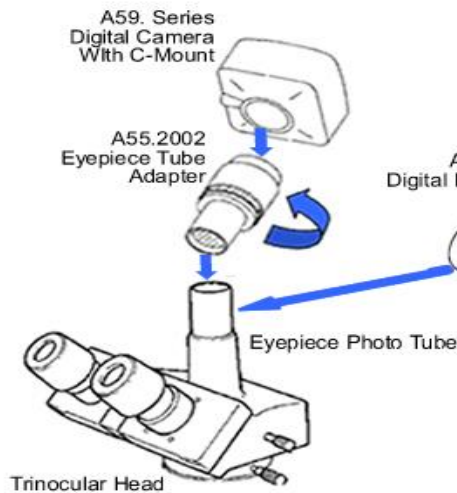
OPTO-EDU

### How Camera Connect To Microscope

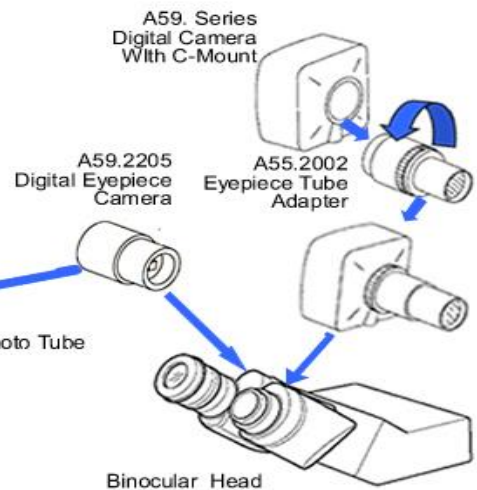
1. To Trinocular Microscope  
On Straight Photo Tube



2. To Trinocular Microscope  
On Eyepiece Photo Tube



3. To Binocular Microscope  
On Eyepiece Tube





# Product Specification

A59.4974 4K 5G WIFI+HDMI+USB Disk Digital Camera, 12.0M, C-Mount, HDMI Measuring

## Advantages

- 12M 4K HDMI+5G WIFI+USB Disk High Speed 30Fps Digital Camera
- No Need Computer, HDMI Interface With Built-in Operation Measure System & Office For Report Creat Directly
- Built-in 32G Memory + USB 3.0 To USB Disk Storage, Control By USB 2.0 Mouse & Keyboard
- 5G WIFI Image Output System Perfectly Compatible With Three Main Systems of Windows, iOS And Android.
- Built-in 10+ Viewing Mode Perfectly Support Biological/Stereo/BF/DF/PL/PH/FL/DIC Etc.

## All-in-One No Need Computer HDMI+WIFI Camera

- Perfectly compatible with three mainstream systems of Windows, iOS and Android.
- Built-in deeply customized operating system. It comes with imaging APP,when starting up , it will connect with microscopic live image instantly and automatically.
- 32GB RAM ,support USB3.0 flash disk to export picture, video data.
- 4K HDMI output to monitor, TV, projector.
- The USB2.0 ports can connect to mouse,keyboard, convenient for measurement and text input.
- Allow to use mobile phone or tablet to scan the dedicated QR code for wireless point-to-point connection to share live imaging.

## A59.4974 4K 5G WIFI+HDMI+USB Disk Digital Camera, 12.0M, C-Mount, HDMI Measuring

Output	4K HDMI Output, With Built-in Software 5G WIFI Output, App Software USB 3.0 Output to USB Disk
Physical Pixel	12.0MP
Sensor Model	Sony IMX412 CMOS
Exposure Mode	Roller Shutter Exposure
Highest Resolution	8K, 4000x 3000 (12.000.000)
Sensor Size	1/2.3"
Pixel Size	1.55µm×1.55µm
Spectral Response	380-650nm, For Fluorescent, Dark Field Image
Exposure	Automatic And Manual
White Balance	Real-time Auto, Manual Adjustment
Record Format	Snapshot Format: JPG Resolution: 4000×3000,3840×2160 Record Format: MP4 file Resolution: 1920×1080@60FPS
Power Consumption	DC 12V 3A
HDMI Output Resolution	Auto-adaptive Display, Up To 3840x2160P30
Supporting Protocol	5G WiFi IEEE 802.11ac
Working Frequency	5.180-5.825GHz
Storage	Built-in 32G Memory, USB 3.0 to USB Disk
HDMI	4K HDMI Output, With Built-in Operation Measure System & Office For Report Creat Directly
WIFI	5G WIFI Image Output System Perfectly Compatible With Three Main Systems of Windows, iOS And Android
USB3.0	Output To USB Disk
USB2.0	Connect To Mouse & Keyboard To Control HDMI Interface Software

# A59.5107

7" LCD Digital Camera, AV Output

NEW

OPTO-EDU

Black 7", 0.58M, 5V DC USB Power Supply, AV Output, Eyepiece Tube 23.2mm Adapter



A59.5107 7" LCD Digital Camera, AV Output	
A59.5107-B	Black 7", 0.58M, 5V DC USB Power Supply, AV Output, Eyepiece Tube 23.2mm Adapter
A59.5107-W	White 7", 0.58M, 5V DC USB Power Supply, AV Output, Eyepiece Tube 23.2mm Adapter

# A59.5109

## 9" LCD Digital Camera, AV Output

NEW

OPTO-EDU



9", 5V DC, AV Output, USB Power Supply, Eyepiece Tube 23.2mm Adapter

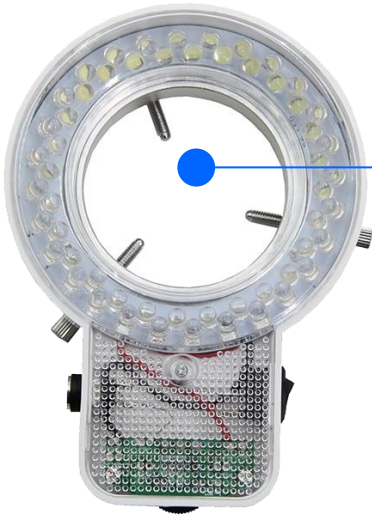




# A56.1211-B, A56.3902-C

## LED Ring Light

**OPTO-EDU**



A56.1211-B LED Ring Light, 56/64/144 LEDs, Dia.61mm

56 bulbs, Continuous Intensity Adjustable

A56.3902-C LED Ring Light, 40 LEDs, Install Dia. 46.6mm, For Mono Zoom Microscope

40 LEDs, Inner Dia. 28mm, Install Dia.46.5mm, Separate Brightness Adjustment



**A56.3902-C40 LED Ring Light, For Mono Zoom Microscope**

Install Dia.	46.5mm
Inner Dia.	28mm
Out Dia.	60.5mm
Power	4.5W
LEDs	40 LEDs
Color Temperature	White Light 6500K, Other Color Can Be Customized
Brightness	0~100% Continuous Adjustable
LED Life	>100000 Hours
Power Input	AC90-240V, 50/60Hz
Power Output	DC12V

# A56.2103-A, A56.2104, A56.3911 LED Ring Light

OPTO-EDU



A56.2103-A LED Ring Light, 56 LEDs, 63mm

56 LEDs, 4.5W, Inner Dia.63mm,  
Light Path Dia.58mm, AC 90~240V

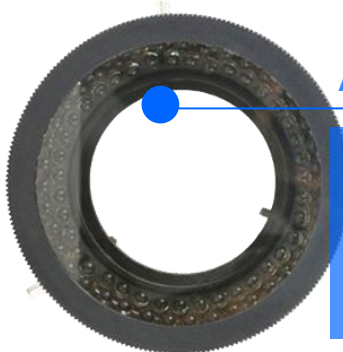
A56.2104 LED Ring Light, 144 LEDs, Dia.63mm

144 LEDs White Color, Color Temperature  
6000~6300, Inner Dia.63mm, Out Dia.93.5mm,  
Thickness 23.5mm, Input AC100~240V/50-60Hz,  
Output DC12V, <8W, 0~100% Brightness Adjustable,  
Brightness 30000lx~40000lx, (When Working  
Distance 100mm), Working Distance 10-300mm



A56.3911 Polarizing LED Ring Light, 78 LEDs, Dia.69mm

78 LEDs, Install Inner Dia.69mm, Total Dia.104mm,  
Power 5W@78pcs, Color Temperature 6400K or  
Customized, Brightness Adjustable, Polarizer 360°  
Rotatable, Analyzer, AC100-240V



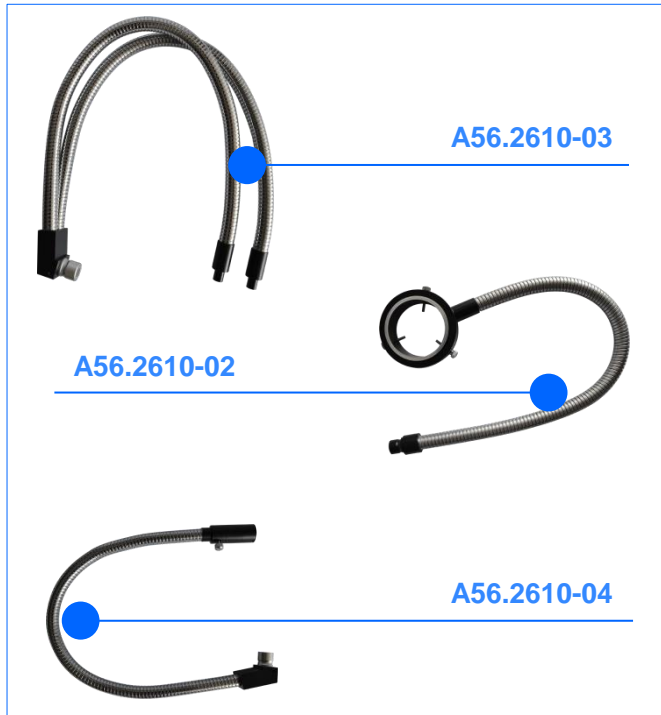
# A56.2617

## LED Cool Light Illuminator

**OPTO-EDU**



550mm long metal-sheathed fiber optic bifurcated light guides



### A56.2617 Cool Light Fiber Optic LED Illuminator Specification

Model	A56.2617-10	A56.2617-20	A56.2617-30
Power	10W LED Lamp	20W LED Lamp	30W LED Lamp
Input voltage	AC 85V~265V, 50Hz-60Hz		
CT	6000K (3000K, 4500K Optional)		
Illuminance	60000Lx, =100W Halogen	90000Lx, =150W Halogen	150000Lx, =250W Halogen
LED Life	30000H		
Fiber Interface	16mm (5/8")		
Cooling System	Built In Large-area Radiator and Cooling Fan		
	Metal Body	Metal Body + Cooling Fan	Metal Body + Cooling Fan
Size	Main Body Size 245x101x157mm,		
Net Weight	2.2kgs	2.4kgs	2.5kgs
Gross Weight	2.9kgs		
Packing Size	290x228x255mm		

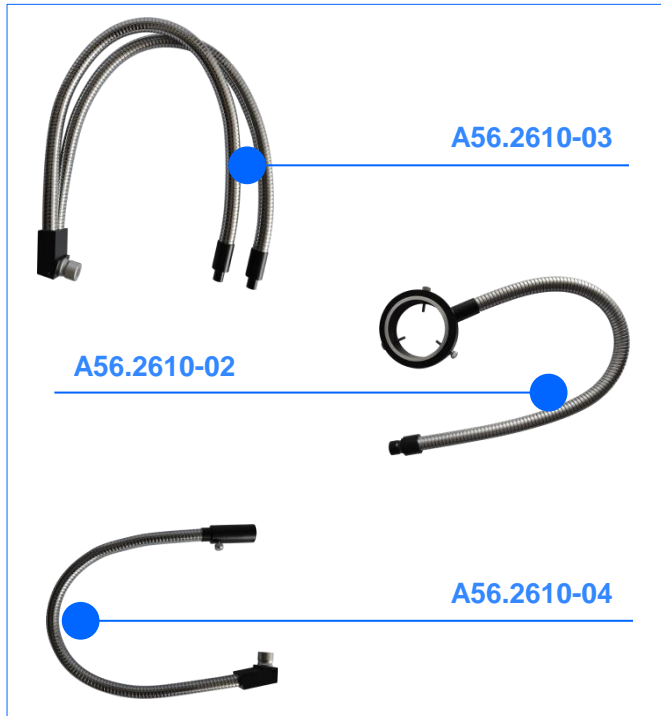
Optional Accessories		Item No.
Fiber Optic Light Guide (Gooseneck type)	Ring Optical Fiber, Length 550mm, Beam Dia. 8mm	A56.2618-01
	Dual Hard Optical Fiber, Length 550mm, Beam Dia. 8mm	A56.2618-02
	Single Hard Optical Fiber, Length 550mm, Beam Dia. 8mm	A56.2618-03
	Ring Optical Fiber, Length 800mm, Beam Dia. 8mm	A56.2618-04
	Dual Hard Optical Fiber, Length 800mm, Beam Dia. 8mm	A56.2618-05
	Single Hard Optical Fiber, Length 800mm, Beam Dia. 8mm	A56.2618-06
	Single Hard Optical Fiber, Length 1000mm, Beam Dia. 8mm	A56.2618-07



# A56.2618

## Cold Light Source, Halogen 150W

OPTO-EDU



550mm long metal-sheathed fiber optic bifurcated light guides

### A56.2618 Cool Light Fiber Optic Halogen Illuminator Specification

Power	21V 150 W Halogen Lamp, With Philips Bulb 13629
Input voltage	AC 85V~265V, 50Hz-60Hz
Color Temperature	3200K
Illuminance	90000Lx, =150W Halogen
Cooling System	Built In Large-area Radiator and Cooling Fan
Bulb Life	200H
Fiber Interface	16mm (5/8")
Size	Main Body Size 245x101x157mm,
Net Weight	2.1kgs
Gross Weight	2.9kgs
Packing Size	290x228x255mm

Optional Accessories		Item No.
Fiber Optic Light Guide (Gooseneck type)	Ring Optical Fiber, Length 550mm, Beam Dia. 8mm	A56.2618-01
	Dual Hard Optical Fiber, Length 550mm, Beam Dia. 8mm	A56.2618-02
	Single Hard Optical Fiber, Length 550mm, Beam Dia. 8mm	A56.2618-03
	Ring Optical Fiber, Length 800mm, Beam Dia. 8mm	A56.2618-04
	Dual Hard Optical Fiber, Length 800mm, Beam Dia. 8mm	A56.2618-05
	Single Hard Optical Fiber, Length 800mm, Beam Dia. 8mm	A56.2618-06
	Single Hard Optical Fiber, Length 1000mm, Beam Dia. 8mm	A56.2618-07

# A56.5110

Attachable LED Light Source, Rechargeable

**OPTO-EDU**

<b>A56.5110</b> Attachable LED Light Source, Rechargeable
<b>A56.5110-S</b> Attachable LED Light Source, Rechargeable With Indicator
<b>A56.5110-N</b> Attachable LED Light Source, Non-Rechargeable
LED 0.75W Brightness Adjustable, Attachable To Student Microscope
Built-in Recharge Battery 3.7V, 400mAh Support 20 Hours Illumination
Smart Recharge Function, With Charging Indicator LED To Show Battery Condition
Powered By DC3.5 USB Charger, USB Port and USB Power Bank



- A56.5110** Attachable LED Light Source, Rechargeable
- A56.5110-S** Attachable LED Light Source, Rechargeable With Indicator
- A56.5110-N** Attachable LED Light Source, Non-Rechargeable



# A56.3910

## Polarizing LED Ring Light

OPTO-EDU



- Special polarized light material, polarized light rotation image is clear
- Brightness Adjustable 0~100% Dimming
- Integrated design, easy to install and save space
- The power supply and light source are designed separately
- The colorless temperature changes when the light source is adjusted
- No flicker of fluorescent lamp, the image is clear

### A56.3910 Polarizing LED Ring Light

Input Voltage	DC24V/500mA
Service Life	>20000Hours
Luminous Color	White Light
Inner Dia.	35mm
Out Dia.	90mm
Installing Calibre	62mm
Output Voltage	DC12V
Brightness Adjustment	0~100% Dimming
Power	10W
LED Quantity	120( $\Phi$ 3 Plug-in Lamp Beads)
Material	Metal Shell
Color Temperature	6000K~6500K
Product Weight	350g



# A56.3912

LED Ring Light, 72 LEDs, 72mm

OPTO-EDU



72 LEDs, Install Inner Dia. 72mm,  
Out Dia.110mm, Power 10W,  
W.D.40-160mm, Color Temperature  
6000K-6500K

OPTO-EDU

# A54.9602

## Heating Stage for Stereo Microscope

OPTO-EDU



E35.3520-A



E35.3520-B



### The specification of A54.9602 Heating Stage for Stereo Microscope

Temperature Range	15 to 70 °C
Measuring Range	$\leq \pm 0.2^{\circ} \text{C}$
Temperature setting method	Digital Display, Preset Temperature Control
Working Condition	15° C - 28° C



# A54.1004

## Temperature Controlled Stage

OPTO-EDU



### A54.1004 Temperature Control Working Stage

Input Power	60W , AC 110V/60Hz, or 230V/50Hz Switchable
Output Power	30V/50W
Fuse	3.15A
Temp. Control Range	20°C~50°C
Temp. Setting Division	0.1°C
Various Between Set And Display Temp.	< +/-1.0°C
Various Between Actual And Display Temp.	< +/-1.0°C
Standard Outfit	--Temperature Controller Box, Size 90*165*190mm --Stage:150x130x5.8mm --Cable: 1 pc --Adhesive Tape: 1 pc --Spare Fuse: 2 pcs
Packing	1pc/Box, Box Size 14*17*20mm, 3 Kgs



# A54

## Working Stage

OPTO-EDU



A54.0301 Manual Working Stage

180x155x26/75x55mm

A54.0302 Manual Working Stage, with Rotatable Glass Plate

180x155x26/75x55mm, with Dia.95mm Glass Plate  
Rotatable 360 Degree



A54.0303 Manual Working Stage 10"

245x190x25/100x100mm, Dia.140mm



A54.0306 Manual Working Stage, with 360° Rotatable Glass Plate

187x160x30/57x55mm, With Dia.95mm Glass Plate  
Rotatable 360°



A54.0601 Moving Stage

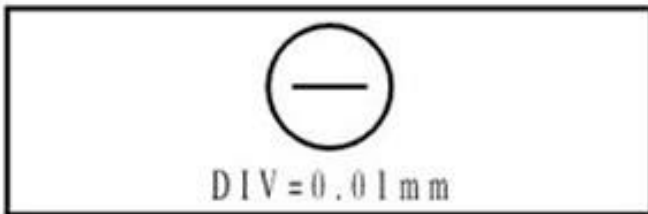
Stage Size 440x290x36mm, XY  
Move Range 300x250mm



# A58.2001

## Stage Micrometer

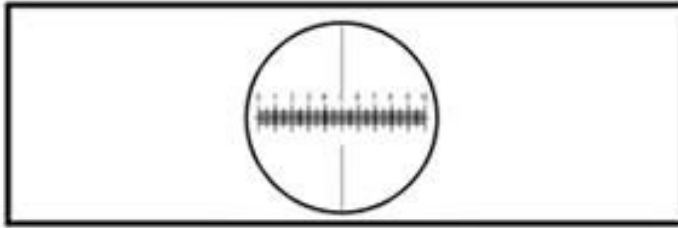
OPTO-EDU



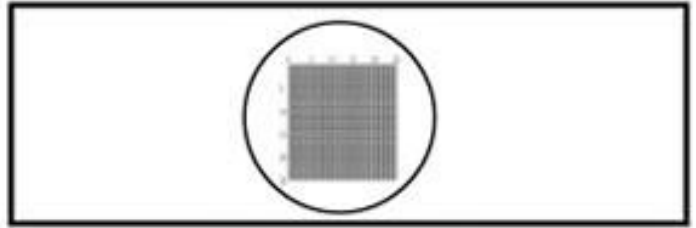
**A58.2001-901**  
100, DIV=0.01mm, 1mm

**A58.2001 Stage Micrometer,  
with High Quality Box**

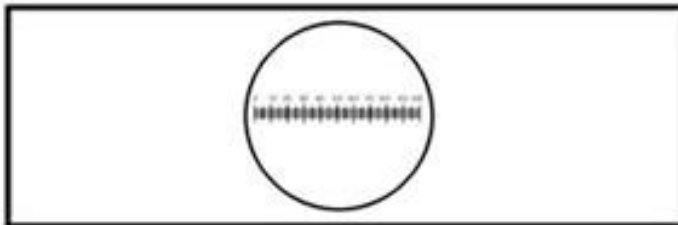
## Product Models



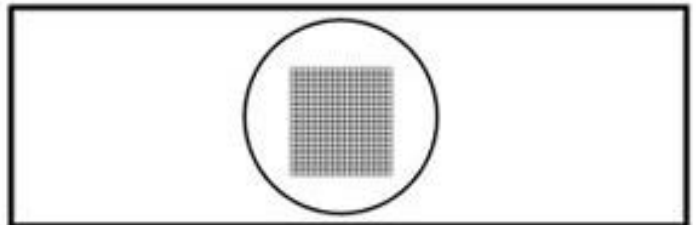
**A58.2001-935**  
100, DIV=0.1mm, 10mm



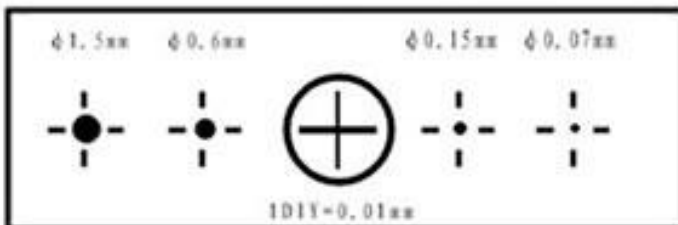
**A58.2001-906**  
Net 25x25, DIV=0.2



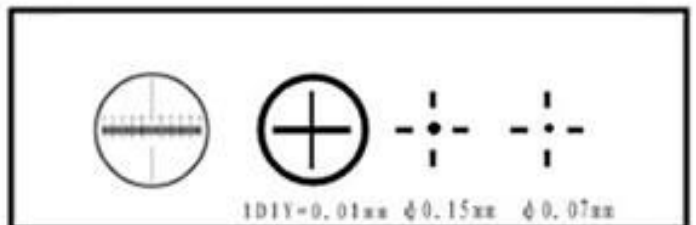
**A58.2001-904**  
100, DIV=0.05mm, 5mm



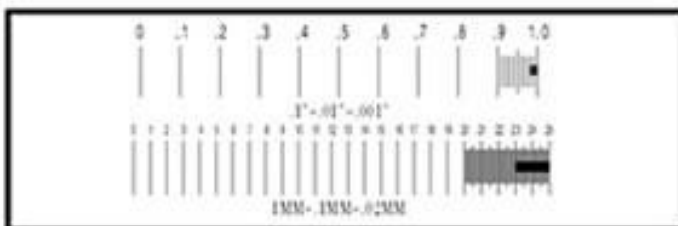
**A58.2001-944**  
Net 20x20, DIV=0.5



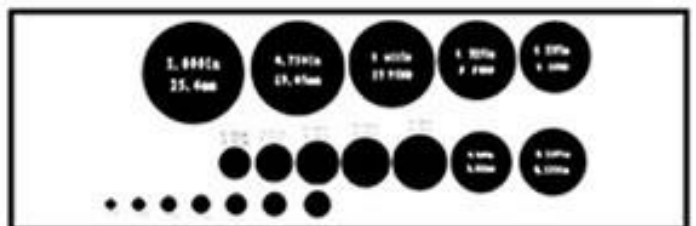
**A58.2001-909**  
Calibration Slide  
Circle Dia. 1.5mm, 0.6mm, 0.15mm, 0.07mm  
100, DIV=0.01mm, 1mm.



**A58.2001-909N**  
Calibration Slide  
Circle Dia. 0.15mm, 0.07mm  
100, DIV=0.1mm, 10mm; 100, DIV=0.01mm, 1mm.



**A58.2001-945**  
Metric System & English System Micrometer  
0.1"-0.01"-0.001", 1mm-0.1mm-0.02mm



**A58.2001-955**  
Circle Micrometer



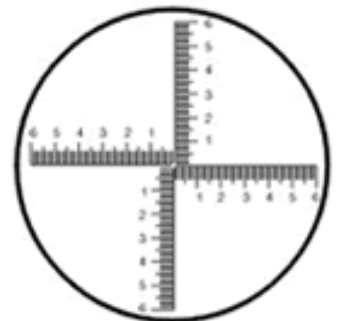
# A58.2002

## Eyepiece Micrometer

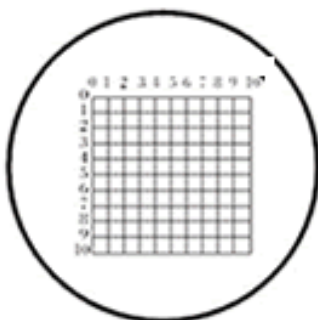
OPTO-EDU



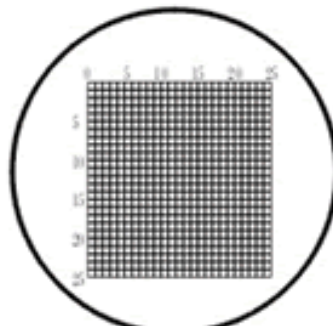
**A58.2002-907**  
Cross 100\*2, DIV=0.1mm



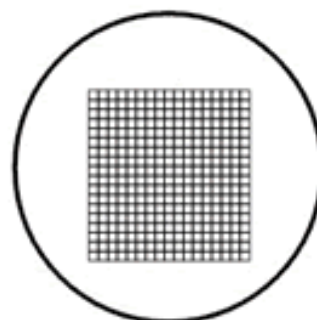
**A58.2002-910**  
Cross 60\*4, DIV=0.1mm



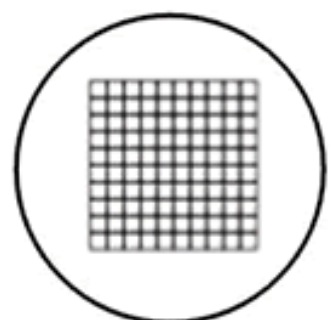
**A58.2002-905**  
Net 10\*10, DIV=0.5mm



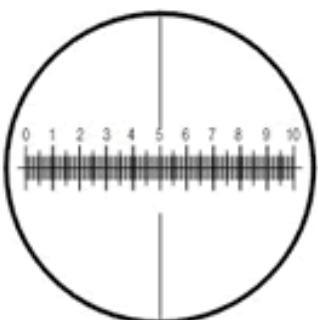
**A58.2002-906**  
Net 25x25, DIV=0.2mm



**A58.2002-944**  
Net 20x20, DIV=0.5mm



**A58.2002-924**  
Net 10\*10, DIV=1.0mm



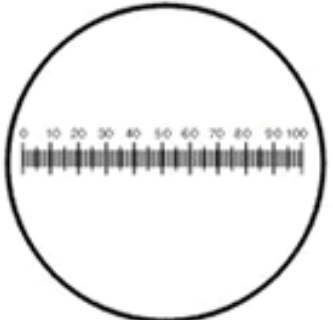
**A58.2002-935**  
10\*10, DIV=0.1mm, 10mm



**A58.2002-920**  
100, DIV=0.1mm, 10mm



**A58.2002-903**  
50, DIV=0.1mm, 5mm

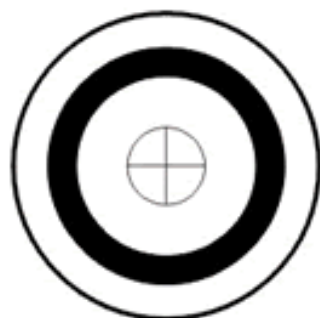


**A58.2002-904**  
100, DIV=0.05mm, 10mm

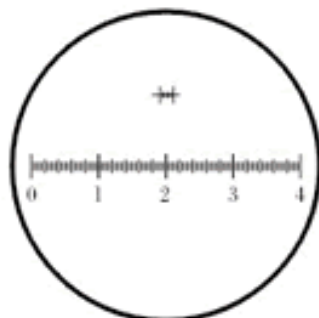
# Product Models

Below Eyepiece Micrometer Models can be Customized

MOQ: 100 pcs



**A58.2002-927**  
Cross



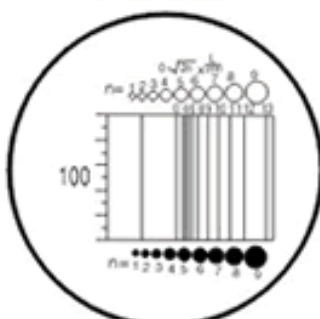
**A58.2002-928**  
200, DIV=0.075mm



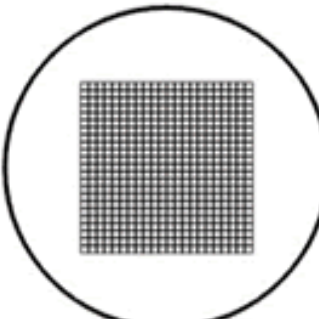
**A58.2002-929**  
Cross + Circle



**A58.2002-930**  
Cross



**A58.2002-902**  
C2/2n



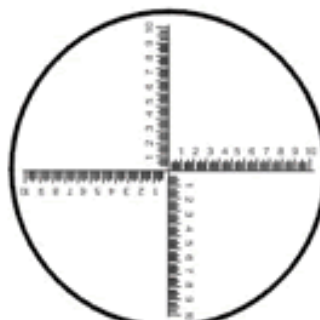
**A58.2002-908**  
Net 100\*100, DIV=0.01mm



**A58.2002-911**  
8, DIV=1.0mm



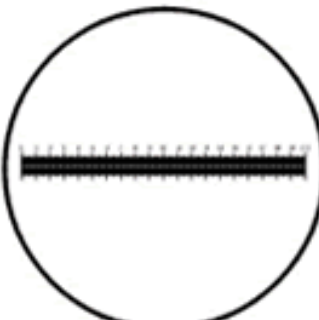
**A58.2002-912**  
Cross, Black Background



**A58.2002-913**  
Cross, 100\*4, DIV=0.1mm



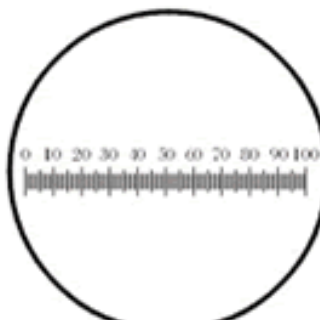
**A58.2002-915**  
Arrow, DIV=0.1mm



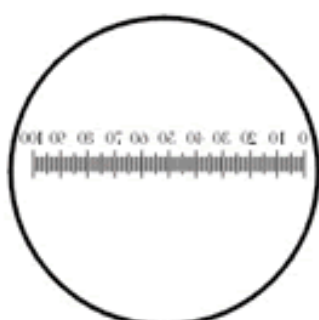
**A58.2002-917**  
200, DIV=0.1mm



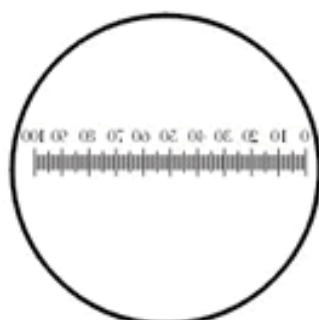
**A58.2002-918**  
Double Cross, DIV=0.1mm



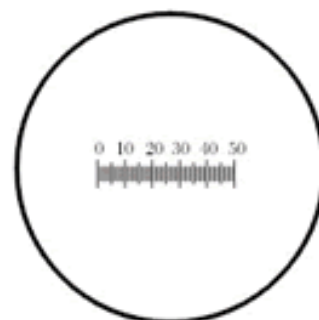
**A58.2002-919**  
100, DIV=0.1mm



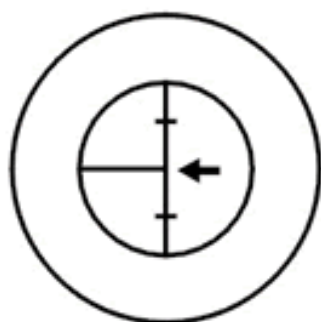
**A58.2002-921**  
100F, DIV=0.05mm



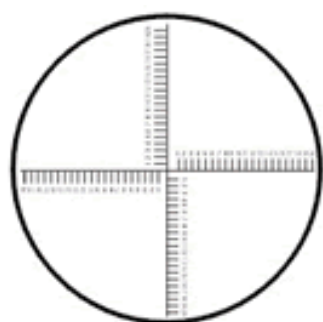
**A58.2002-922**  
100F, DIV=0.05mm



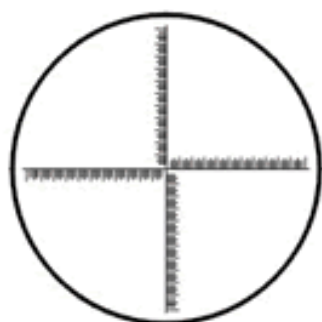
**A58.2002-923**  
50, DIV=0.25mm



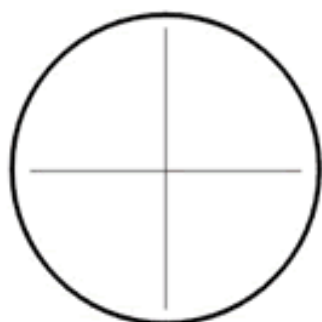
**A58.2002-931**  
Cross + Arrow



**A58.2002-932**  
Cross 20\*4, DIV=0.4mm



**A58.2002-934**  
Cross 90\*4, DIV=0.1mm



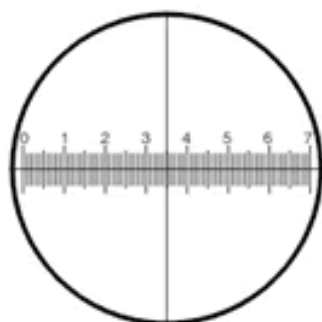
**A58.2002-937**  
Cross line



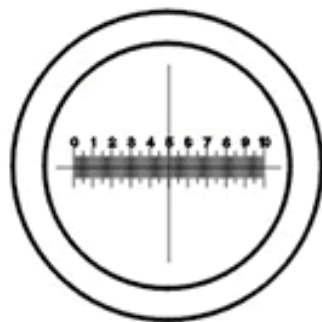
**A58.2002-938**  
Cross 40\*4, DIV=0.0576mm



**A58.2002-939**  
Cross



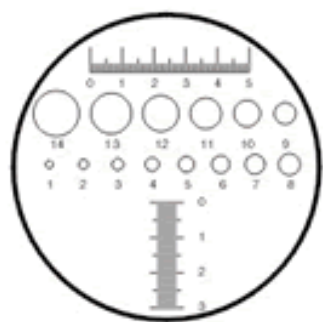
**A58.2002-941**  
140, DIV=0.1mm



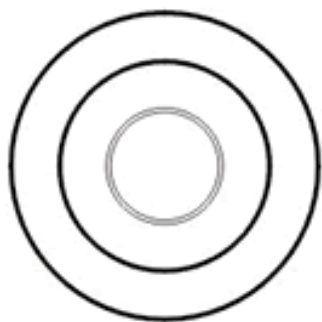
**A58.2002-942**  
100, DIV=0.1mm



**A58.2002-943**  
Cross 55\*4, DIV=0.05mm



**A58.2002-949**  
DIV 0.025-1.6/0.1mm



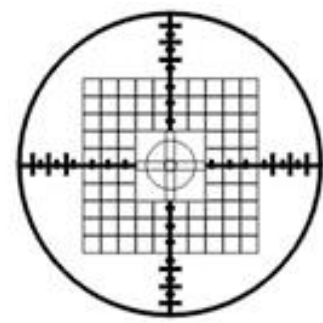
**A58.2002-950**  
DIV=0.1mm



**A58.2002-952**  
120, DIV=0.1mm



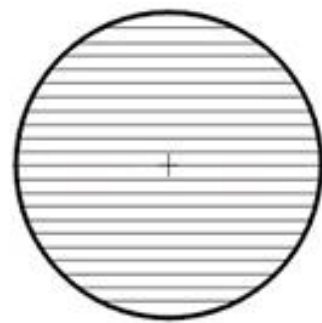
**A58.2002-953**  
Cross 100\*4, DIV=0.05mm



**A58.2002-954**  
Cross/Net 10\*10,  
DIV=0.25/0.05mm



**A58.2002-956**  
Arrow, DIV=0.1mm



**A58.2002-957**  
Parallel Line, DIV=0.4mm



# OPTO-EDU .22 Series Digital Microscope 2021

## HDMI & WIFI , Auto Focus Camera



A59.2221  
HDMI Digital Camera,  
720P

1.2M, 2M  
HDMI+SD  
Mouse Control  
Small Size 50\*50\*54mm  
Better Choose 2M



A59.2222  
HDMI+USB Digital  
Camera, 1080P

2M  
HDMI+USB+SD  
Mouse Control  
HDMI+USB



A59.2223  
HDMI+WIFI+SD Digital  
Camera

2M,5M  
HDMI+WIFI+SD  
Mouse Control  
HDMI/WIFI Sync Output  
Better Choose 5M



A59.2240  
Auto Focus HDMI+WIFI+SD  
Camera

2M,5M  
HDMI+WIFI+SD  
Mouse Control  
HDMI/WIFI Sync Output  
**Autofocus 5M!**

**New!**

## USB 2.0 Camera



A59.2208  
Digital Camera,  
C-Mount Type

USB2.0 CMOS  
0.35M~14M  
5fps@5.0M  
**Most Popular**



A59.2208-E  
USB2.0  
Digital Camera

USB2.0 CMOS  
1.2M~8.3M  
6.4fps@5.0M  
High Sensitive  
Low Noise



A59.2208-U  
USB2.0  
Digital Camera

USB2.0 CMOS  
3.1M~16M  
7fps@5.0M  
With Buffer Memory

## USB 3.0 Cooled



A59.2225  
USB3.0 CMOS Cooled  
Digital Camera,  
Fluorescent Use

USB3.0 CMOS+Cooling  
Cooling -42°C Anti-Fog  
10M~20M  
Fluorescent, DF,DIC Use  
1 Hour Exposure  
**Fluorescent Image 20M!**

## USB 3.0 Camera



A59.2211  
Digital Camera,  
USB3.0 CMOS,  
C-Mount+Eyepiece

USB3.0 CMOS  
3.1M~18M  
14.2fps@5.0M  
**Most Popular**



A59.2213  
USB3.0 CMOS  
Digital Camera,  
High Fps

USB3.0 CMOS  
1.5M~21M  
Fluorescent Image  
**High 120-164fps!!**  
**GS (Globe Shutter)**



A59.2212  
Digital Camera,  
USB3.0 CCD  
C-Mount+Eyepiece

USB3.0 **CCD**  
1.4M~12M  
7.5@2748x2200.6M  
Fluorescent Image



A59.2226  
USB3.0 CCD Cooled  
Digital Camera,  
Fluorescent Use

USB3.0 **CCD**+Cooling  
Cooling -50°C Anti-Fog  
1.4M~20M  
Fluorescent, DF,DIC Use  
1 Hour Exposure

## Digital Eyepiece



**A59.2205**  
Economical USB2.0  
Digital Eyepiece  
Camera

USB2.0 CMOS  
0.35~5M  
2fps@5.0M  
Dia.23.2mm



**A59.2205-B**  
Economical USB2.0  
Digital Eyepiece  
Camera

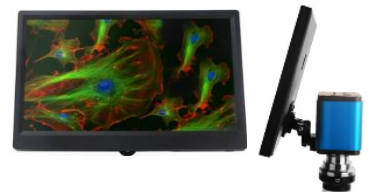
USB2.0 CMOS  
0.35~5M  
2fps@5.0M  
Dia.23.2mm  
Built-in Reduction Lens



**A59.2205-C**  
Economical USB3.0  
Digital Eyepiece  
Camera

USB3.0 **CCD**  
5M  
15fps@5.0M  
Dia.23.2mm

## HDMI Monitor



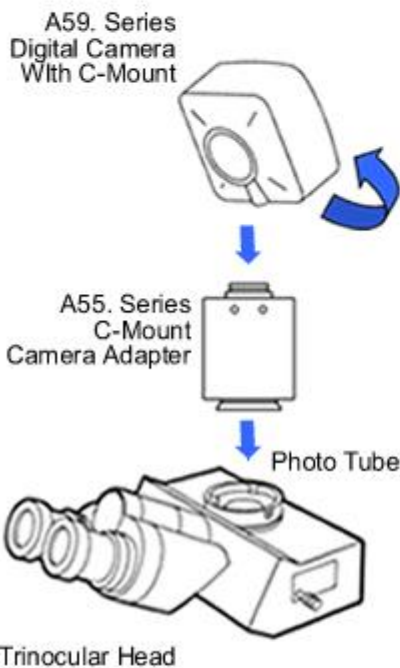
**A59.2226**  
11.6" HDMI Monitor

11.6" LCD  
1080P,100:1  
HDMI Input, LED Backlight  
For HDMI Camera

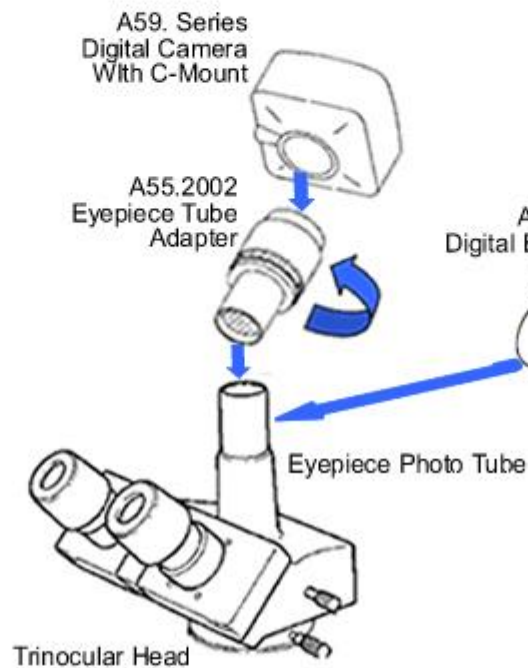
## OPTO-EDU

## How Camera Connect To Microscope

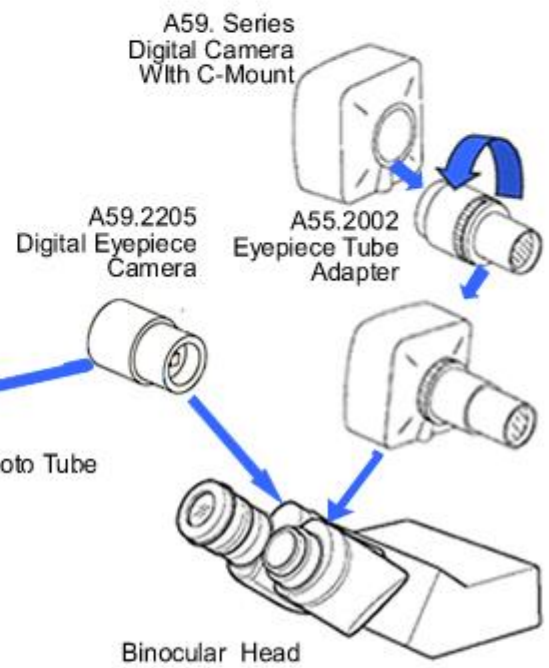
### 1. To Trinocular Microscope On Straight Photo Tube



### 2. To Trinocular Microscope On Eyepiece Photo Tube



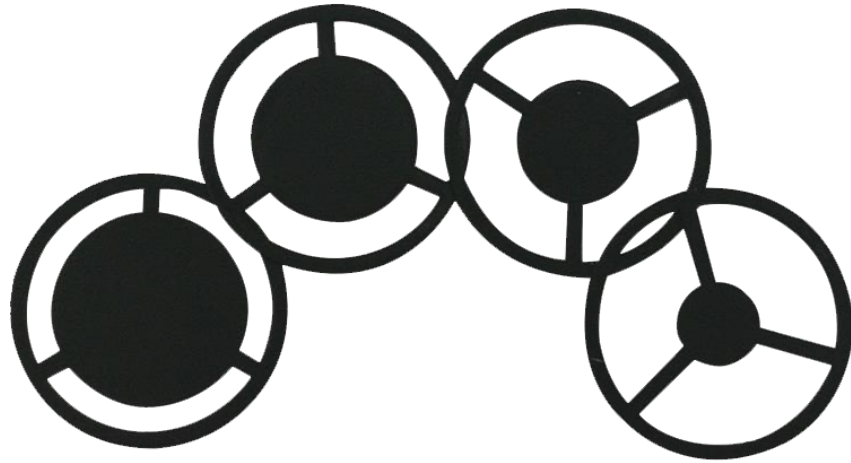
### 3. To Binocular Microscope On Eyepiece Tube



# A5D.0001

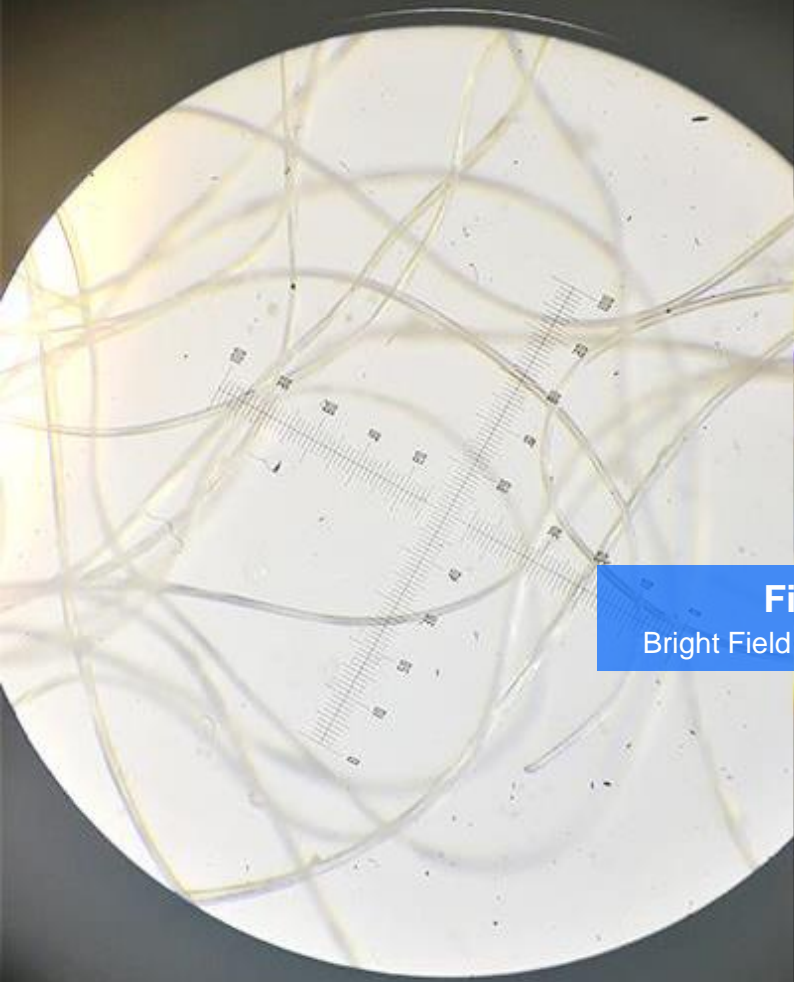
## Dark Field Plate Set

OPTO-EDU



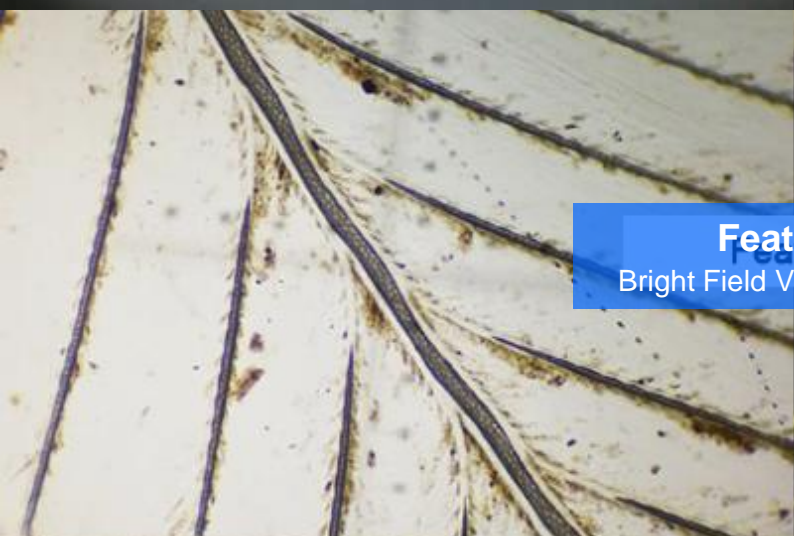
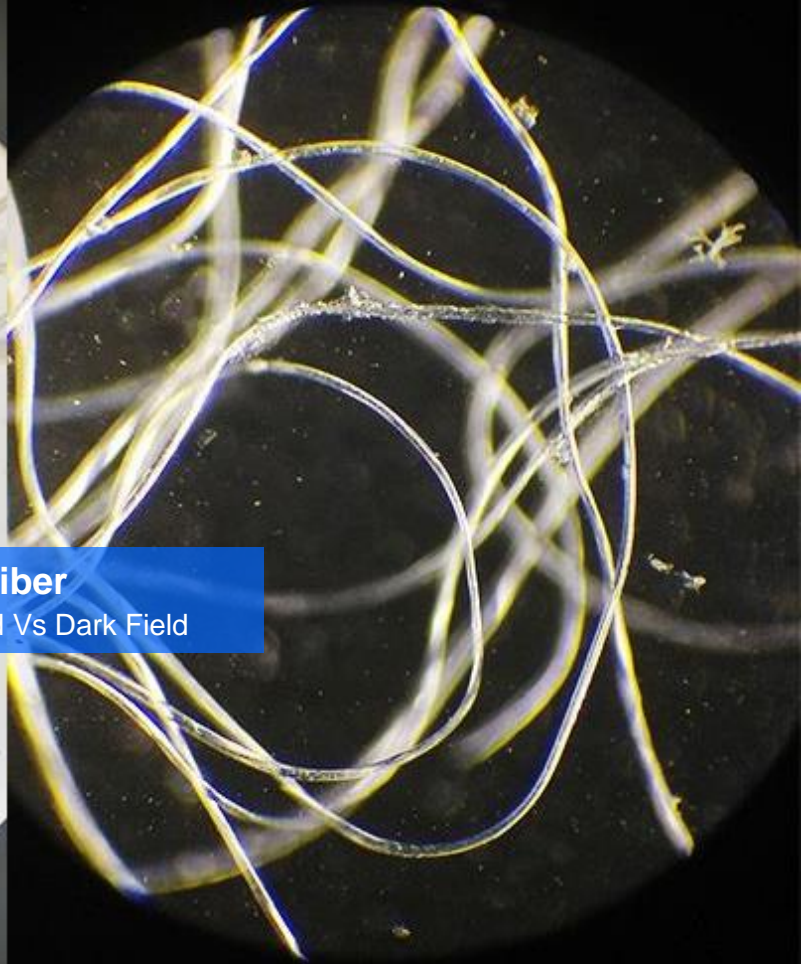
Made By Metal Plate, Out Dia.32mm, For 4x10x40x100x Objective Dark Field View, Economical Design For Most Of Biological Microscope, Size Can Be Customized.





**Fiber**

Bright Field Vs Dark Field



**Feather**

Bright Field Vs Dark Field



**Rock**

Bright Field Vs Dark Field

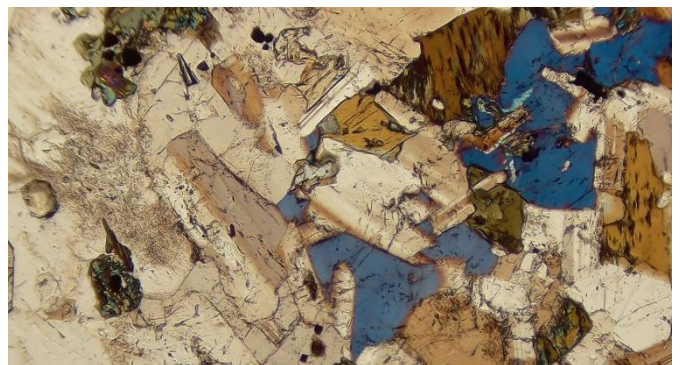
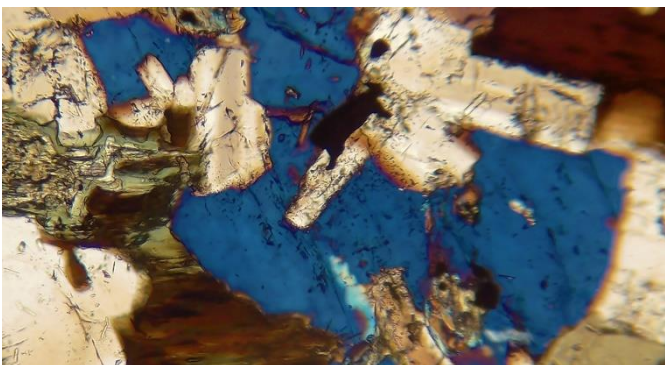
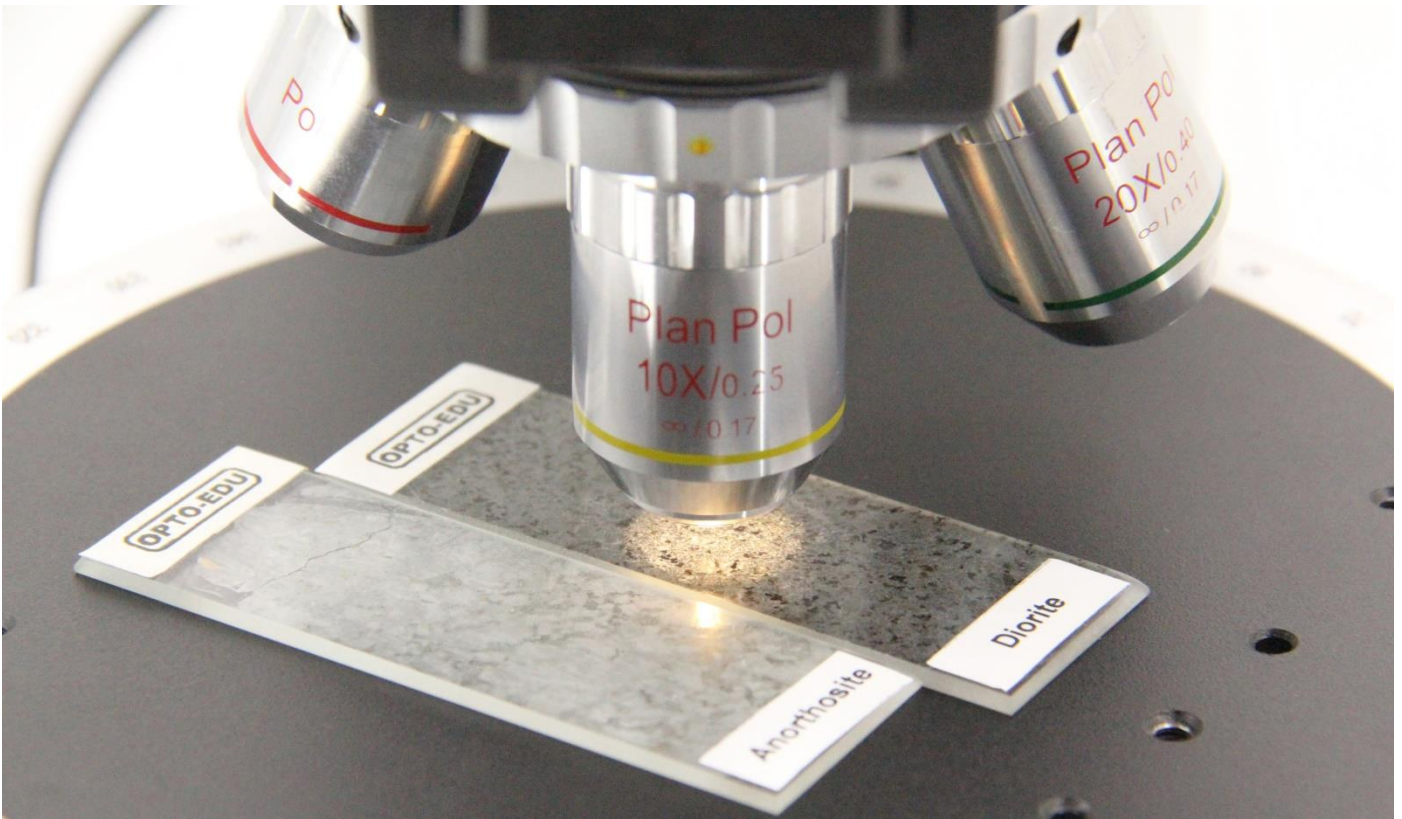




E35.3629

Rock Thin Section Prepared Slide

OPTO-EDU





# A41.1901

Operating Microscope, Step Zoom 3x~12x, For ENT, Surgery, Dental, Ophthalmology, Gynecology, Table Mount, Column Mount

OPTO-EDU

A41.1901-A

Classical & Popular Student Microscope Model In Amazon Market  
Binocular Head 45° Inclined, 360° Rotatable  
Eyepiece WF10x/18mm, Achromatic Objective 4x,10x,40x Spring  
Plan Stage With Vernial Scale, 90x90mm, Moving Range 30x50mm  
Dual LED For Up/Bottom Illumination

Use Real Shots





# A41.1901 Series



# Product Specification

## A41.1901 Series Operation Microscope Specification

A41.1901 Series Operating Microscopes, is the basic economical high quality series. It use fibre-optic cable for coaxial illumination, with 3 steps zoom body, has total magnification 2.3x~12x, featured with flexible handling and easy operation. It is widely used in hospital for ENT (ear-nose-throat), dental, ophthalmology, gynecology, surgery, orthopedics and etc.

Model	A41.1901-A	A41.1901-C	A41.1901-CZ	A41.1901-B	A41.1901-D
Binocular Head	Straight			45° Tilted	
Main Usage	ENT, Surgery			Dental, Ophthalmology, Gynecology	
Total Magnification	With Objective F=200mm: 4.7x, 7.5x, 12x With Objective F=300mm: 3.0x, 5.0x, 8.0x				
Total Magnification (Optional)	With Objective F=250mm: 3.7x, 6.0x, 9.6x With Objective F=400mm: 2.3x, 3.8x, 6.0x				
Eyepiece	17.24x				
Head Magnification	6x				
Interpupillary Distance	50~80mm Adjustable				
Diopter	Both Left & Right Eyetube Diopter Adjustable ±5D				
Zoom Body	3 Steps Zoom: 0.6x, 1.0x, 1.6x				
Objective	F=200mm For Ear, Nose F=300mm For Ear, Nose			F=200mm For Ophthalmology F=300mm For Gynecology	
Objective (Optional)	F=400mm For Throat			F=250mm For Dental	
Focusing	Fine Focusing Range 10mm				
Filter	Green, Yellow Filters Built-in				
Balancing Arm	2-Part Arm With Universal Joints				
Stand	2-Part Column + Five Star Base With Caster	Table Mount Clamp	Column Mount, Customrized To Customer	2-Part Column + Five Star Base With Caster	Table Mount Clamp
Illumination System	Coaxial Illumination, 10W LED, Brightness Adjustable, >30000 Lux				
Power Supply	Wide Range AC100~240V, DC12V 3A, 36W				
Video Adapter	Not Available				

## A41.1901 Series Operation Microscope Optional Accessories

Objective	F=250mm, For A41.1901-B, -D	A52.1901-250
	F=400mm, For A41.1901-A, -C, -CZ	A52.1901-400
Mount	Table Mount Clamp	A54.1901-T
	Wall Mount Bracket	A54.1901-W
Monitor Mount	Monitor Mount: 1 Fix Arm And 1 Gas Spring Arm With Tension Adjustable. Band Clamp. Fit 15-27" Screen. VESA Standard 75x75xmm & 100x100mm. Load Capacity 0~8 Kgs, Swivel 180°, Tilt -80°~+90°, Rotation 360°	A54.1910-112B
	Monitor Mount: 1 Fix Arm And 1 Mechanic Spring Arm With Tension Adjustable. Band Clamp. Fit 15-27" Screen. VESA Standard 75x75xmm & 100x100mm. Load Capacity 0~8 Kgs, Swivel 180°, Tilt -80°~+90°, Rotation 360°	A54.1910-312B

## A41.1901 Series Operation Microscope Optical Characteristics

Focal Length (mm)	F=200mm			F=250mm (Optional)			F=300mm			F=400mm (Optional)		
Zoom Body	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x
Total Magnification	12x	7.5x	4.7x	9.6x	6.0x	3.7x	8.0x	5.0x	3.0x	6.0x	3.8x	2.3x
Linear Field (mm)	15.8	25.3	40.6	19.7	31.6	50.7	23.6	37.9	60.8	31.5	50.5	81.0
Exit Pupil Dia.(mm)	1.04	1.66	1.66	1.04	1.66	1.66	1.04	1.66	1.66	1.04	1.66	1.66
Exit Pupil Distance (mm)	15.30											
Resolution (LP/mm)	67.0	44.5	29.7	60.0	35.4	27.0	47.2	31.5	23.6	35.0	27.0	19.8

# A41.1902

Operating Microscope, For ENT, Surgery, Dental, Ophthalmology, Gynecology

**OPTO-EDU**

Straight Binocular Head For ENT, Surgery

Total Magnification 3x~12x, Step Zoom Body 0.6x, 1x, 1.6x

Objectives F=200mm, 300mm, 400mm For Different Operating

With 50:50 Beamsplitter, With C-Mount To Connect Digital Camera Or LCD

2 Parts Column + Five Star Base With Caster



**A41.1902-C**



**A41.1902-D**

## A41.1902 Series Operation Microscope Optical Characteristics

Focal Length (mm)	F=200mm			F=250mm (Optional)			F=300mm			F=400mm (Optional)		
Zoom Body	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x
Total Magnification	12x	7.5x	4.7x	9.6x	6.0x	3.7x	8.0x	5.0x	3.0x	6.0x	3.8x	2.3x
Linear Field (mm)	15.8	25.3	40.6	19.7	31.6	50.7	23.6	37.9	60.8	31.5	50.5	81.0
Exit Pupil Dia.(mm)	1.04	1.66	1.66	1.04	1.66	1.66	1.04	1.66	1.66	1.04	1.66	1.66
Exit Pupil Distance (mm)	15.30											
Resolution (LP/mm)	67.0	44.5	29.7	60.0	35.4	27.0	47.2	31.5	23.6	35.0	27.0	19.8



# Product Specification

## A41.1902 Series Operation Microscope Specification

A41.1902 Series Operating Microscopes, is the basic economical high quality series. It use fibre-optic cable for coaxial illumination, with 3 steps zoom body, has total magnification 2.3x~12x, featured with flexible handling and easy operation. It is widely used in hospital for ENT (ear-nose-throat), dental, ophthalmology, gynecology, surgery, orthopedics and etc.

Model	A41.1902-C	A41.1902-D
Binocular Head	Straight	45° Tilted
Main Usage	ENT, Surgery	Dental, Ophthalmology, Gynecology
Total Magnification	With Objective F=200mm: 4.7x, 7.5x, 12x With Objective F=300mm: 3.0x, 5.0x, 8.0x	
Total Magnification (Optional)	With Objective F=250mm: 3.7x, 6.0x, 9.6x With Objective F=400mm: 2.3x, 3.8x, 6.0x	
Eyepiece	17.24x	
Head Magnification	6x	
Interpupillary Distance	50~80mm Adjustable	
Diopter	Both Left & Right Eyetube Diopter Adjustable $\pm 5D$	
Zoom Body	3 Steps Zoom: 0.6x, 1.0x, 1.6x	
Objective	F=200mm For Ear, Nose F=300mm For Ear, Nose	F=200mm For Ophthalmology F=300mm For Gynecology
Objective (Optional)	F=400mm For Throat	F=250mm For Dental
Focusing	Fine Focusing Range 10mm	
Filter	Green, Yellow Filters Built-in	
Balancing Arm	2-Part Arm With Universal Joints, <b>Counterweight Adjustable And Lockable</b>	
Stand	2-Part Column + Five Star Base With Caster	
Illumination System	Coaxial Illumination, 10W LED, Brightness Adjustable, >30000 Lux	
Power Supply	Wide Range AC100~240V, DC12V 3A, 36W	
Video Adapter	<b>50:50 Beamsplitter (A55.1906)</b>	
	<b>C-Mount 0.3x For 1/3" Digital Camera (A55.1903)</b>	

## A41.1902 Series Operation Microscope Optional Accessories

Objective	F=250mm, For A41.1902-D	A52.1901-250
	F=400mm, For A41.1902-C	A52.1901-400
Photo Adapter	SLR Camera Adapter For NIKON DSLR Or CANON SLR	A55.1904
Head	Teaching Head, Demonstrator	A55.1910
Mount	Table Mount Clamp	A54.1901-T
	Wall Mount Bracket	A54.1901-W
Monitor Mount	Monitor Mount: One fix arm and one <b>gas spring arm</b> with tension adjustable. Band clamp. Fit 15-27 inch screen. VESA standard: 75x75xmm & 100x100mm. Load capacity: 0-8 Kgs. Swivel:180°. Tilt: -80°~+90°. Rotation:360°	A54.1910-112B
	Monitor Mount: One fix arm and one <b>mechanical spring arm</b> with tension adjustable. Band clamp. Fit 15-27 inch screen. VESA standard: 75x75xmm & 100x100mm. Load capacity: 0-8 Kgs. Swivel:180°. Tilt: -80°~+90°. Rotation:360°	A54.1910-312B

HOT

# A41.1903

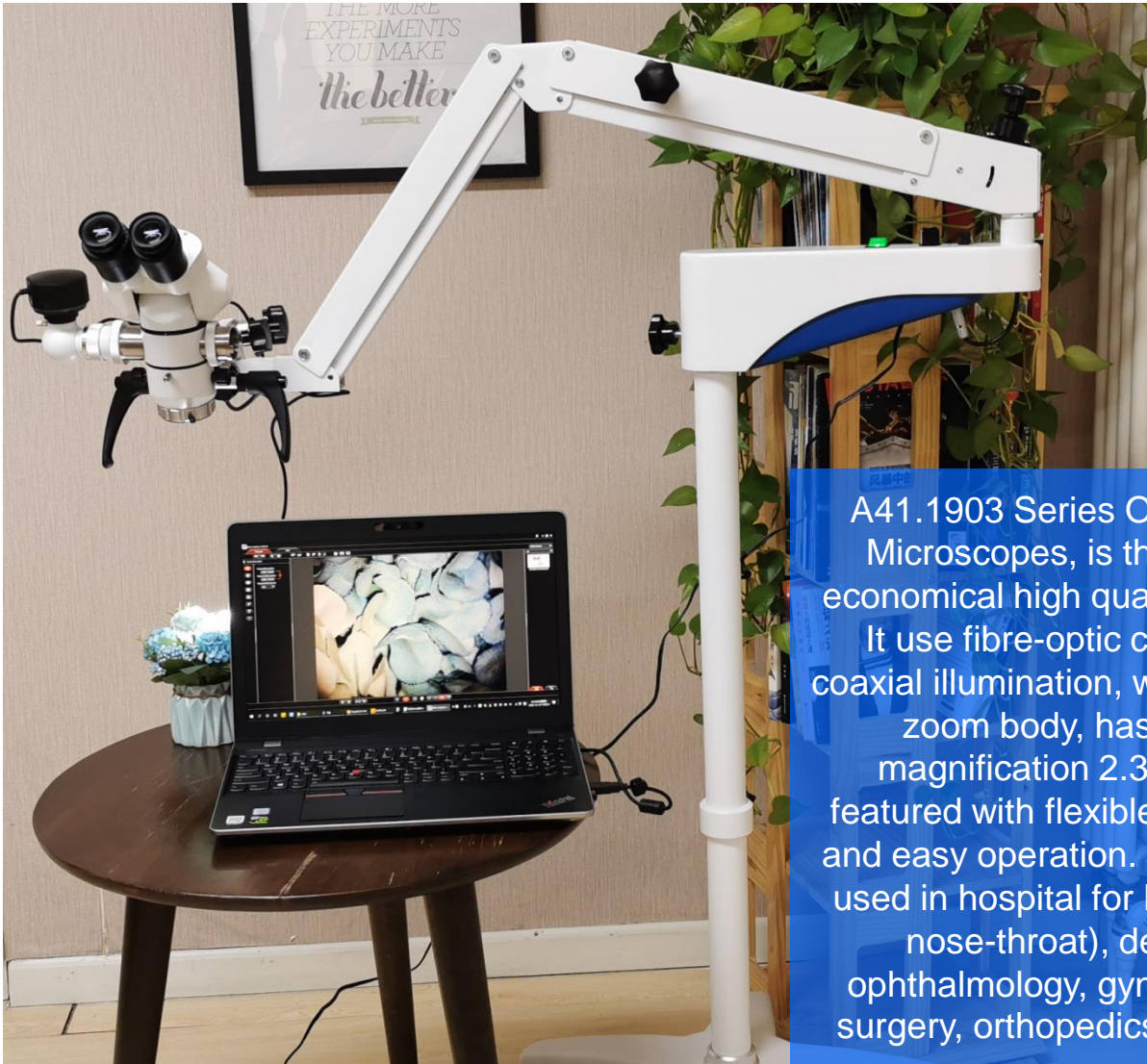
Operating Microscope, Step Zoom 4.8x~16x, For Dental, ENT, Ophthalmology, Gynecology

OPTO-EDU



8x Tilting 0~180° Binocular For Dental, ENT, Ophthalmology, Gynecology  
Total Magnification 4.8x~16x, Step Zoom Body 0.6x, 1x, 1.6x  
Objectives F=200mm, 250mm, 300mm, 400mm For Different Operating  
10W LED High Brightness Light Source  
2 Parts Column + Five Star Base With Caster

## Product Specification



A41.1903 Series Operating Microscopes, is the basic economical high quality series. It use fibre-optic cable for coaxial illumination, with 3 steps zoom body, has total magnification 2.3x~12x, featured with flexible handling and easy operation. It is widely used in hospital for ENT (ear-nose-throat), dental, ophthalmology, gynecology, surgery, orthopedics and etc.

Model	A41.1903
Binocular Head	Tilting 0~180°
Main Usage	Dental, ENT, Ophthalmology, Gynecology
Total Magnification	With Objective F=200mm: 6.0x, 10x, 16x With Objective F=250mm: 4.8x, 8.0x, 12.8x
Total Magnification (Optional)	With Objective F=300mm: 4.0x, 6.7x, 10.7x With Objective F=400mm: 3.0x, 5.0x, 8.0x
Eyepiece	WF12.5x/20mm
Head Magnification	8x
Interpupillary Distance	50~80mm Adjustable
Diopter	Both Left & Right Eyetube Diopter Adjustable $\pm 7D$
Zoom Body	3 Steps Zoom: 0.6x, 1.0x, 1.6x
Objective	F=200mm For Ear, Nose, Ophthalmology F=250mm For Dental
Objective (Optional)	F=300mm For Ear, Nose F=400mm For Throat
Focusing	Fine Focusing Range 10mm
Filter	Green, Yellow Filters Built-in
Balancing Arm	2-Part Arm With Universal Joints, Counterweight Adjustable And Lockable
Stand	2-Part Column + Five Star Base With Caster
Illumination System	Coaxial Illumination, 10W LED, Brightness Adjustable, >40000 Lux
Power Supply	Wide Range AC100~240V, DC12V 3A, 36W



### A41.1903 Series Operation Microscope Optional Accessories

Eyepiece	WF10x/23mm	A51.1901-1023
Objective	F=300mm	A52.1901-300
	F=400mm	A52.1901-400
	F=200mm/250mm/300mm Zoom, Connection Thread: M47x0.5mm(Zeiss) / M65x0.5mm(Leica), Or M47x0.75mm / M51x0.75mm / M56x0.75mm, Or Customized According To Customer Requirements	A52.1902-01
	F=200mm/250mm/300mm Zoom, With Splash Cover Connection Thread: M47x0.5mm(Zeiss) / M65x0.5mm(Leica), Or M47x0.75mm / M51x0.75mm / M56x0.75mm, Or Customized According To Customer Requirements	A52.1902-02
Adapter	50:50 Beamsplitter	A55.1906
	C-Mount 0.3x For 1/3" Digital Camera	A55.1903
	SLR Camera Adapter For NIKON DSLR Or CANON SLR	A55.1904
Head	Teaching Head, Demonstrator	A55.1910
	Tiltable Head, Inclinable Angle: 0-180°, Eyepiece 12.5X/20mm, Interpupillary Distance 50~80mm, Magnification 8x, F=160mm, Distance of Center 22mm. Optional Eyepiece: 10x/23mm	A53.1903-01
Mount	Table Mount Clamp	A54.1901-T
	Wall Mount Bracket	A54.1901-W
Monitor Mount	Monitor Mount: 1 Fix Arm And 1 Gas Spring Arm With Tension Adjustable. Band Clamp. Fit 15-27" Screen. VESA Standard 75x75xmm & 100x100mm. Load Capacity 0~8 Kgs, Swivel 180°, Tilt -80°~+90°, Rotation 360°	A54.1910-112B
	Monitor Mount: 1 Fix Arm And 1 Mechanic Spring Arm With Tension Adjustable. Band Clamp. Fit 15-27" Screen. VESA Standard 75x75xmm & 100x100mm. Load Capacity 0~8 Kgs, Swivel 180°, Tilt -80°~+90°, Rotation 360°	A54.1910-312B

### A41.1903Series Operation Microscope Optical Characteristics

Eyepiece	WF12.5x/20mm											
Focal Length (mm)	F=200mm			F=250mm			F=300mm (Optional)			F=400mm (Optional)		
Zoom Body	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x
Total Magnification	16x	10x	6.0x	12.8x	8.0x	4.8x	10.7x	6.7x	4.0x	8.0x	5.0x	3.0x
Linear Field (mm)	15.0	24.0	40.0	19.0	30.0	50.0	23.0	37.0	60.0	30.0	48.0	80.0
Diameter of Spot (mm)	57.00			71.00			86.00			113.00		
Exit Pupil Distance (mm)	20.00											
Eyepiece	WF10x/23mm											
Focal Length (mm)	F=200mm			F=250mm			F=300mm (Optional)			F=400mm (Optional)		
Zoom Body	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x	1.6x	1.0x	0.6x
Total Magnification	12.8x	8.0x	4.8x	10.2x	6.4x	3.8x	8.5x	5.3x	3.2x	6.4x	4.0x	2.4x
Linear Field (mm)	16.0	26.5	43.0	20.0	33.0	53.0	24.5	39.5	64.5	32.0	52.5	85.5
Diameter of Spot (mm)	57.00			71.00			86.00			113.00		
Exit Pupil Distance (mm)	25.00											

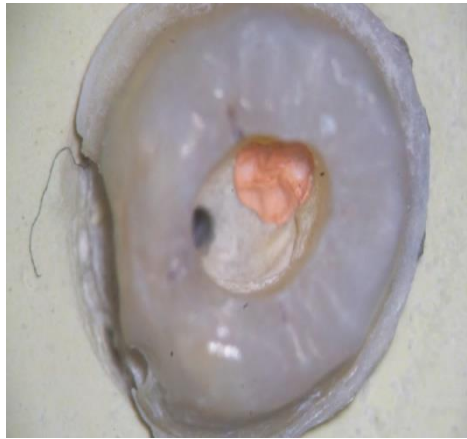
# A41.1905

Operating Microscope, One Head 0-200° , Manual Zoom, 2.7x-23x, For Dental

OPTO-EDU



Halogen Light Source



LED Light Source

1 People 1 Binocular Head, Titable 0-200°, Interpupillary 53-76mm, Diopter +/-6D  
Manual Continous Zoom 1:6, Total Manification 2.3x~27x, Zoom Objective F=180-300mm  
LED High Brightness Light Source, Max 80000Lux, Light Spot Dia.80mm  
Built-in Digital Camera, Control Handle To Take Picture/Video  
One Hand Control Stop Freely With 120° Balance Arm, Four Feets Stand Max Extend Range 1250mm

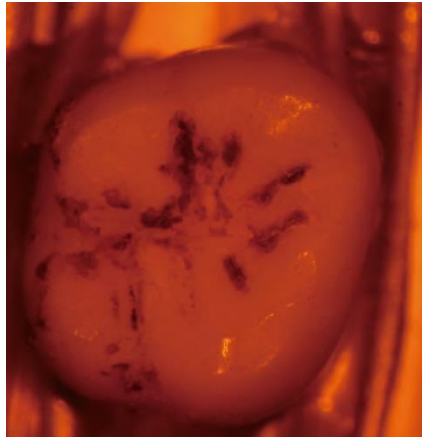
## Optional Accessories

Accessories	
Auxiliary Lens F=200/300/350/400/450	A52.1941
Zoom Lens F=180-300mm	A52.1942
Zoom Lens F=200-500mm	
Wedge Light Splitter, 1 Port	A55.1941
Light Splitter, 2 Ports	A55.1942
SLR Camera Adapter	A55.1943
Mobile Phone Adapter & Holder	A55.1944
C-Mount For Digital Camera	A55.1945

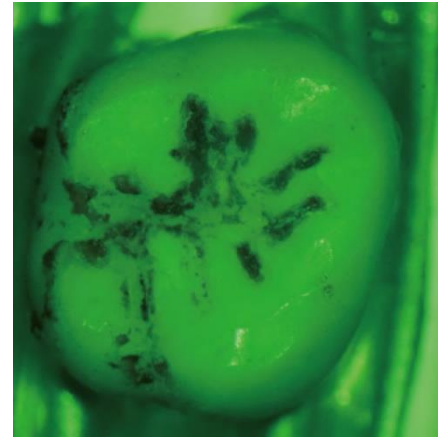
Using American ultra-long-life medical LED white light source, color temperature 5500K, high color rendering index, high brightness, strong reduction, long-term use without fatigue, and more suitable for dental surgery needs compared with traditional halogen lamps. LED energy consumption is low, the service life can be as long as 100,000 hours



Normal Light Spot



Yellow Light Spot




Green Light Spot

Built-in yellow and green color filters, normal, yellow, and green color filters can be adjusted through the built-in dial button. The yellow spot can prevent the resin material from curing too fast, and the green spot can more clearly see the blood vessels in the blood environment











## Specification











### A41.1905 Operating Microscope, One Head 0-200°, Manual Zoom, 2.7x-23x, For Dental











Eyepieces	Magnification 12.5x, Pupil Distance Adjustable Range 53mm~76mm, Diopter Adjustment Range +6D ~ -6D
Binocular Tube	High Brightness 0~200 Binocular Tube
Magnification	1:6 Manual Continuous Zoom, Magnification 2.3~27x; Field Of View $\Phi$ 89.6 $\Phi$ 8mm
X-Y Movement Device	X Direction Swing 45°, Y Direction Swing 45°
Coaxial Illumination	LED Cold Light, Illumination Diameter Of Light Spot $\Phi$ 80mm, Illumination Intensity 80000lux Build-in Small-spot, Both Blue And Yellow Light Filter
Objectives	180mm -300mm Zoom Lens (Optional F=175mm, 200mm, 350mm, 400mm etc )
Maximum Length Of Arm	1100mm
New Stand	Swing Angle Of The Carrier Arm 0-300°, Height From Objective To Floor 730mm < H < 1250mm
Weight	107Kg

Picture	Catalogue No.	Dental	ENT Ear, Nose, Throat	Ophthalmology	Orthopedics Hand Surgery Chest Surgery	Burn & Plastic	Andrology Gynecology Genitourinary	Animal Anatomy	Neuro-surgery Brain Surgery
	A41.1905	●							













Picture	Catalogue No.	Dental	ENT Ear, Nose, Throat	Ophthalmology	Orthopedic Hand Surgery Chest Surgery	Burn & Plastic	Andrology Gynecology Genitourinary	Animal Anatomy	Neuro-surgery Brain Surgery
	A41.1901-A		•						
	A41.1901-B	•		•			•		
	A41.1901-C		•						
	A41.1901-CZ		•						
	A41.1901-D	•		•			•		
	A41.1902-C		•						
	A41.1902-D	•		•			•		
	A41.1903	•	•	•			•		
	A41.1940				•	•	•	•	
	A41.1941				•	•	•	•	

Picture	Catalogue No.	Dental	ENT Ear, Nose, Throat	Ophthalmology	Orthopedic Hand Surgery Chest Surgery	Burn & Plastic	Andrology Gynecology Genitourinary	Animal Anatomy	Neuro- surgery Brain Surgery
	A41.1942				•	•	•	•	
	A41.1950		•						•
	A41.1951		•						•
	A41.1952		•						•
	A41.3400			•					
	A41.3401			•					
	A41.3402			•					
	A41.3403			•					
	A41.3404		•	•	•		•		
	A41.3405			•	•				

Picture	Cata. No.	Total Magnification	Head C-Mount	Body Magnification	Standard Objective	Optional Objective	Light Source	Stand Foot Switch Optional	Package	Application
	A41.1901-A	3x~12x	One Head 90°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	5 Star Stand Cannot Use Beam Splitter	2 Ctns 0.23CBM 49Kgs	Ear, Nose, Throat
	A41.1901-B	3x~12x	One Head 45°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	5 Star Stand Cannot Use Beam Splitter	2 Ctns 0.23CBM 49Kgs	Dental Gynecology Ophthalmology
	A41.1901-C	3x~12x	One Head 90°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	Table Mount Cannot Use Beam Splitter	1 Ctn 0.11CBM 15Kgs	Ear, Nose, Throat
	A41.1901-CZ	3x~12x	One Head 90°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	Pole Mount Cannot Use Beam Splitter	1 Ctn 0.11CBM 15Kgs	Ear, Nose, Throat
	A41.1901-D	3x~12x	One Head 45°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	Table Mount Cannot Use Beam Splitter	1 Ctn 0.11CBM 15Kgs	Dental Gynecology Ophthalmology
	A41.1902-C	3x~12x	One Head 90° Beam Splitter C-Mount	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	5 Star Stand Optional: Teach Head SLR Camera Mount	2 Ctns 0.26CBM 59Kg	Ear, Nose, Throat
	A41.1902-D	3x~12x	One Head 45° Beam Splitter C-Mount	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	5 Star Stand Optional: Teach Head SLR Camera Mount	2 Ctns 0.26CBM 59Kg	Dental Gynecology Ophthalmology
	A41.1903	4.8x~16x	One Head 0-180°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=250mm	F=300mm F=400mm	Coaxial Light	5 Star Stand Beam Splitter Teach Head SLR Camera Mount	2 Ctns 0.26CBM 59Kg	Ear, Nose, Throat Dental Gynecology Ophthalmology
	A41.1940	2x-30x	Dual Head	Motor Zoom 1:6	F=200mm	F=175mm F=250mm F=300mm F=350mm F=180~300mm	Coaxial Light	8 Direction Foot Switch X/Y/Z/Zoom Beam Splitter C-Mount	164Kgs	Orthopedics Hand & Chest Burn & Plastic Andrology Gynecology Genitourinary Animal Anatomy
	A41.1941	6x10x16x	Dual Head	Manual Step 0.6x, 1x, 1x, 1.6x	F=200mm	F=175mm F=250mm F=300mm F=350mm F=180~300mm	Coaxial Light	2 Direction Foot Switch X/Y Beam Splitter C-Mount	117Kgs	Orthopedics Hand & Chest Burn & Plastic Andrology Gynecology Genitourinary Animal Anatomy



Picture	Cata. No.	Total Magnification	Head C-Mount	Body Magnification	Standard Objective	Optional Objective	Light Source	Stand Foot Switch Optional	Package	Application
	A41.1942	6x10x16x	Dual Head	Manual Step 0.6x, 1x, 1x, 1.6x	F=200mm	F=175mm F=250mm F=300mm F=350mm F=180~300mm	Coaxial Light	6 Direction Foot Switch X/Y/Z 3 Heads Beam Splitter C-Mount	107Kgs	Orthopedics Hand & Chest Burn & Plastic Andrology Gynecology Genitourinary Animal Anatomy
	A41.1950	3x~16x	Dual Head Beam Splitter	Motor Zoom 3x~16x	F=300mm	F=175mm F=200mm F=250mm F=350mm F=180~300mm	Coaxial Light	8 Direction Foot Switch X/Y/Z/Zoom C-Mount	164Kg	Neurosurgery Brain Surgery Ear, Nose,Throat
	A41.1951	2x~12.5x	One Head 90°	Manual Zoom 2x~12.5x	F=300mm	F=175mm F=200mm F=250mm F=350mm F=180~300mm	Coaxial Light	2 Direction Foot Switch X/Y Beam Splitter C-Mount	107Kgs	Neurosurgery Brain Surgery Ear, Nose,Throat
	A41.1952	2x~12.5x	Dual Head	Manual Zoom 2x~12.5x	F=300mm	F=175mm F=200mm F=250mm F=350mm F=180~300mm	Coaxial Light	2 Direction Foot Switch X/Y Beam Splitter C-Mount	107Kgs	Neurosurgery Brain Surgery Ear, Nose,Throat
	A41.3400	4-24x	One Head 30-90°	Motor Zoom 4x~24x	F=200mm	F=175mm F=250mm F=350mm	6°+0° Coaxial	8 Direction Foot Switch X/Y/Z/Zoom	2 Cartons 0.418CB M 87Kg	Ophthalmology
	A41.3401	4.6x~27x	Dual Head	Motor Zoom 4.6x~27x	F=200mm	F=175mm F=250mm F=350mm	6°+0° Coaxial 20° Oblique	8 Direction Foot Switch X/Y/Z/Zoom	5 Cartons 0.756CB M 215Kg	Ophthalmology
	A41.3402	4x-25x	Dual Head	Motor Zoom 4x-25x	F=200mm	F=175mm F=250mm F=350mm	6°+0° Coaxial 20° Oblique Slit Lamp	8 Direction Foot Switch X/Y/Z/Zoom	5 Cartons 0.786CB M 213Kg	Ophthalmology
	A41.3403	5.3x8x12x	One Head 45°	Manual Step 5.3x8x12x	F=200mm	F=175mm F=250mm F=350mm	6°+0° Coaxial	2 Direction Foot Switch X/Y	1 Carton 0.2CBM 41Kg	Ophthalmology
	A41.3404	6x10x16x	One Head 45°	Manual Step 6x10x16x	F=200mm	F=175mm F=250mm F=350mm	6°+0° Coaxial	Table Mount & Working Table	2 Cartons 0.283CB M 61Kg	Ophthalmology Ear, Nose,Throat Surgery Gynecology
	A41.3405	2.7x-25x,	Dual Head Teach Head Beam Splitter C-Mount	Manual Step 5 Levels	F=200mm F=250mm F=350mm	F=175mm	6°+0° Coaxial 25° Oblique Slit Lamp Red Reflect For Cataract	6 Direction Foot Switch X/Y/Z	5 Cartons 0.727CB M 210Kg	Ophthalmology Cataract Surgery Surgery

# A41.1940

Operating Microscope, Dual Head, For Orthopedics, Hand, Chest, Burn And Plastic Surgery, Andrology, Genitourinary, Animal Anatomy

OPTO-EDU



2 People 2 Binocular Head Same Magnification Same View Field  
Manual 4 Steps Zoom Body 0.6x, 1.0x, 1.0x, 1.6x, Parallel Light System  
Motorized Foot Switch Control Focusing Up/Down, X/Y Moving And Zoom In/Out  
Four Feet With Locking Wheels, Max Extended Length 1250mm  
Coaxial Illumination, Light Spot Dia.50mm, Max Brightness 100000 Lux



## Continuous Magnification

Electric several manual stepless zoom, the magnification can be continuously adjusted from 2-30x

# Product Specification

## A41.1940 Surgical Operation Microscope Features

**A41.1940** Series Operating Microscopes, is advanced high quality series. It use fibre-optic cable for coaxial illumination, with 3 steps zoom body, has total magnification 2x~30x, featured with Motorized Focusing, it is widely used in hospital for Orthopedics, Hand, Chest, Burn And Plastic Surgery, Andrology, Genitourinary, Animal Anatomy and etc.

- 2 People 2 Binocular Head Same Magnification Same View Field
- Manual 4 Steps Zoom Body 0.6x,1.0x, 1.0x, 1.6x, Parallel Light System
- 8 Directions Motorized Foot Switch Control Focusing Up/Down, X/Y Moving And Zoom In/Out
- Four Feet With Locking Wheels, Max Extended Length 1250mm
- Coaxial Illumination, Light Spot Dia.50mm, Max Brightness 100000 Lux

## A41.1940 Surgical Operation Microscope Specification

Main Usage	Orthopedics, Hand, Chest, Burn And Plastic Surgery, Andrology, Genitourinary, Animal Anatomy
2 Heads 2 People	Main Head Binocular, 45° Inclined, Interpupillary Distance 53~76mm Assitant Head Binocular, 45° Inclined, Interpupillary Distance 53~76mm, 180° Oppsite To Main Head, Same Magnification Same View Field As Main Head
Diopter	Both Left & Right Eyetube Diopter Adjustable $\pm 6D$
Eyepiece	WF12.5x
Zoom Body	Motorized Continues Zoom 1:6, Parallel Light System
Objective	F=200mm
Total Magnification	2x~30x
View Field	Dia.55mm~6mm
Focusing	Motorized Focuing Controled By Foot Switch, Focusing Range +/-25mm, Focusing Speed 33s/Full Range, Auto Return To Zero
Foot Switch	8 Directions X/Y/Z + Zoom In/Out Motorized Foot Switch --Control Focusing Up/Down, Moving Range 50mm --Control X/Y Moving, Moving Range 60mm --Control Magnification Zoom In/Out --Water Proof Design
Stand	Luxury Stand With Control Electrical Parts Built-in --Max Extended Length 1250mm --Max Rotatable Angle Of Arm 0~300° --Distance Between Objective And Gound Surface 800mm~1250mm
Illumination	Coaxial Illumination, Light Spot Dia.50mm, Max Brightness 100000 Lux
Weight	164Kgs

Optional Accessories		Cata. No
Objective	F=175mm	A52.1941-175
	F=250mm	A52.1941-250
	F=300mm	A52.1941-300
	F=350mm	A52.1941-350
	Zoom F=180~300mm	A52.1941-1830
Adapter	Beamsplitter	A55.1941
	C-Mount 0.3x For 1/3" Digital Camera	A55.1942



# A41.1950

Operating Microscope, Dual Head, For Neurosurgery,  
Brain Surgery, ENT

OPTO-EDU



2 People 2 Binocular Motorized Swing Head In X Direction  $\pm 45^\circ$ , In Y Direction  $+90^\circ$   
Motor Zoom 3x~16x Controlled By Foot Switch Or Manual Switch Parallel Light System  
Motorized Foot Switch Control Zoom, Focusing Up/Down, X/Y Moving  
Stand Max Extended Length 1200mm Arm Swing  $0\sim 300^\circ$   
Dual Optical Fiber Coaxial Light Spot Dia.78mm Max Brightness 10000 Lux



A52.1941 Objective



A52.1941-1830



A55.1951



A55.1952

# Product Specification

## A41.1950 Surgical Operation Microscope Features

**A41.1950** Series Operating Microscopes, is advanced high quality series. It use fibre-optic cable for coaxial illumination, with 3 steps zoom body, has total magnification 2x~30x, featured with Motorized Focusing, it is widely used in hospital for Orthopedics, Hand, Chest, Burn And Plastic Surgery, Andrology, Genitourinary, Animal Anatomy and etc.

- 2 People 2 Binocular Motorized Swing Head In X Direction +/-45°, In Y Direction +90°
- Motor Zoom 3x~16x Controled By Foot Switch Or Manual Switch Parallel Light System
- 8 Directions Motorized Foot Switch Control Focusing Up/Down, X/Y Moving And Zoom In/Out
- Stand Max Extended Length 1200mm Arm Swing 0~300°
- Dual Optical Fiber Coaxial Light Spot Dia.78mm Max Brightness 100000 Lux

## A41.1950 Surgical Operation Microscope Specification

Main Usage	Neurosurgery, Brain Surgery, ENT
Head	Main Head Binocular 30°~90° Angle Adjustable, Interpupillary Distance 55~75mm By Knob
	Assitant Head Binocular, 45° Inclined, Interpupillary Distance 56~76mm, 360° Rotatable For Easy View, Same Magnification Same View Field As Main Head
	Motorized <b>Swing Head</b> In X Direction +/-45°, In Y Direction +90°, Can Stop At Any Angle
Adapter	Beamsplitter Included 2 Ports, For Assistant Head And C-Mount
Diopter	Both Left & Right Eyetube Diopter Adjustable ±6D
Eyepiece	WF12.5x
Zoom Body	Motorized Continues Zoom 1:6, Parallel Light System
Objective	F=300mm
Total Magnification	3x~16x
View Field	Dia.74mm~12mm
Focusing	Motorized Focusing Controled By Foot Switch, Focusing Range +/-25mm, Focusing Speed 33s/Full Range, Auto Return To Zero
Foot Switch	8 Directions X/Y/Z + Zoom In/Out Motorized Foot Switch --Control Focusing Up/Down, Moving Range 50mm --Control X/Y Moving, Moving Range 60mm --Control Magnification Zoom In/Out --Water Proof Design
Stand	Luxury Stand With Control Electrical Parts Built-in --Max Extended Length 1200mm --Max Rotatable Angle Of Arm 0~300° --Distance Between Objective And Gound Surface 800mm~1250mm
Illumination	Coaxial Halogen Illumination, Light Spot Dia.78mm, Max Brightness 100000 Lux
Weight	164Kgs

Optional Accessories		Cata. No
Objective	F=175mm	A52.1941-175
	F=250mm	A52.1941-250
	F=300mm	A52.1941-300
	F=350mm	A52.1941-350
	Zoom F=180~300mm	A52.1941-1830
Switch	Handle Switch For Focusing & Zoom	A55.1951
Adapter	C-Mount 0.3x For 1/3" Digital Camera	A55.1952

# A41.3400

Operating Microscope, Zoom 4x-24x, Foot Switch Phthalmology, ENT, Surgery

OPTO-EDU



Binocular Head, 30°-90° Incline Adjustable, Eyepiece 12.5x, IPD 50-75mm  
Motor/Manual Zoom Magnification 4-24x With Objective F=200mm, W.D.190mm  
Foot Switch Control Fine Focusing Speed  $\leq 2\text{mm/S}$ , Range  $\geq 30\text{mm}$  And X/Y Moving Range 50x50mm  
Halogen 15V150W Light, 6°+0° Coaxial Illumination  $\geq 40,000\text{ Lx}$  With Orange Filter  
Pole Stand With Reaching Radius Of Arm 1020mm, Vertical Adjustable Range  $\pm 250\text{mm}$

## A41.3400 Operating Microscope, Ophthalmology, Otorhinolaryngology, Surgery

Head	Binocular
Eyepiece Magnification	12.5x/16mm
Visual Angle Of Eyepiece	30°-90°(Eyepiece Moving Between 0°-180° Is Optional)
Objective Lens	F=200(F=175/250/300 Is Optional)
Working Distance	190mm
Magnification For Main Microscope	4x-24x
Diameter Of Field	41.5mm-7.5mm
Diopter Adjustment	$\pm 6\text{D}$
Pupil Distance	50mm-75mm
Maximal Resolution	119 LP/mm
Illumination Source	15V/150W, Medical Cold-reflection Halogen Bulb
Illumination Type	6°+0°Coaxial Illumination Of Cold Light Source
Coaxial Illumination	$\geq 40000\text{lx}$
Filters	Orange Filter(Cobalt Filter Is Optional)
Reaching Radius Of Arm	1020mm
Adjustable Vertical Range	250mm
Fine Focusing Speed And Range	$\leq 2\text{mm/s}$ , $\geq 30\text{mm}$
Speed For X/Y And Range	$\leq 2\text{mm/s}$ , 50mmx50mm
Input Voltage	AC220V $\pm 22\text{v}$ /50Hz $\pm 1\text{Hz}$ , AC110v $\pm 11\text{v}$ /60Hz $\pm 1\text{Hz}$
Power	200VA
Fuse	AC 250V T4.0A, AC 125V T8.0A
Electrical Safety Standard	Executive Standard:GB9706.1-2007,Class I
Packing Volume	0.418m <sup>3</sup> , 2cartons
Total Weight	87kg



# A41.3401

Operating Microscope, Dual Head, Motor Zoom, 4.6x~27x,  
8 Directions Foot Switch, For Phthalmology

**OPTO-EDU**























Dual Binocular Head, Eyepiece 12.5x/18mm, IPD 45-80mm, Diopter  $\pm 7$   
Motor/Manual Zoom Magnification 4.6x-27x With Objective F=200mm, W.D.170mm,  
8 Directions Foot Switch Control Fine Focusing Speed  $\leq 2\text{mm/S}$ , Range  $\geq 30\text{mm}$  And X/Y Moving Range  
50x50mm  
Reaching Radius of Arm 1230mm, Vertical Adjustable Range 880-1420mm; Fine Focusing  $\leq 2\text{mm/s}$ ,  
 $\geq 50\text{mm}$ , XY Range 50x50mm  
Halogen 12V100W; 6°Coaxial 65000lx & 26°Oblique Illumination, Brightness Adjustable Level 1-9 60000lx

## Product Specification











### A41.3401 Operating Microscope, Ophthalmology, Otorhinolaryngology, Surgery











Head	Double Binocular
Eyepiece Magnification	12.5x/18mm
Objective Lens	F=200
Working Distance	170mm
Magnification For Main Microscope	4.6x-27x Motorized And Manual Control Continuous Magnification
Magnification For Assistant Microscope	6x, 10x, 16x
Diameter Of Field	46mm ~ 8.5mm
Diopter Adjustment	$\pm 7D$
Pupil Distance	50mm-75mm (Main Microscope Is 45mm -80mm)
Maximal Resolution	119 LP/mm
Focusing Range For Assistant Microscope	$\geq 30\text{mm}$
Illumination Source	12V/100W, Cold Reflection Halogen Lamp For Medical Use
Illumination Type	6°+0°Coaxial Illumination Of Cold Light Source, 26°Oblique Illumination
Coaxial Illumination	$\geq 65000\text{lx}$ , 1 ~ 9level, Panel Operated
Oblique Illumination	$\geq 60000\text{lx}$ , 1 ~ 9level, Panel Operated
Reaching Radius Of Arm	1230mm
Adjustable Vertical Range	880mm ~ 1420mm
Fine Focusing Speed And Range	$\leq 2\text{mm/s}$ , $\geq 40\text{mm}$
Speed For X/Y And Range	$\leq 2\text{mm/s}$ , 50mmx50mm
Input Voltage	AC220V $\pm 22\text{V}$ /50Hz $\pm 1\text{Hz}$ , AC110V $\pm 11\text{V}$ /60Hz $\pm 1\text{Hz}$
Power	170VA
Fuse	AC250V T4.0A , AC1250V T8.0A
Electrical Safety Standard	Executive Standard:GB9706.1-2007, Class I
Packing Volume	0.756m <sup>3</sup> , 5cartons
Total Weight	215kg

Picture	Catalogue No.	Dental	ENT Ear, Nose, Throat	Ophthalmology	Orthopedic Hand Surgery Chest Surgery	Burn & Plastic	Andrology Gynecology Genitourinary	Animal Anatomy	Neuro- surgery Brain Surgery
	A41.1901-A		•						
	A41.1901-B	•		•			•		
	A41.1901-C		•						
	A41.1901-CZ		•						
	A41.1901-D	•		•			•		
	A41.1902-C		•						
	A41.1902-D	•		•			•		
	A41.1903	•	•	•			•		
	A41.1940				•	•	•	•	
	A41.1941				•	•	•	•	

Picture	Catalogue No.	Dental	ENT Ear, Nose, Throat	Ophthalmology	Orthopedic Hand Surgery Chest Surgery	Burn & Plastic	Andrology Gynecology y Genitourinary	Animal Anatomy	Neuro- surgery Brain Surgery
	A41.1942				•	•	•	•	
	A41.1950		•						•
	A41.1951		•						•
	A41.1952		•						•
	A41.3400			•					
	A41.3401			•					
	A41.3402			•					
	A41.3403			•					
	A41.3404		•	•	•		•		
	A41.3405			•	•				



Picture	Cata. No.	Total Magnification	Head C-Mount	Body Magnification	Standard Objective	Optional Objective	Light Source	Stand Foot Switch Optional	Package	Application
	A41.1901-A	3x~12x	One Head 90°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	5 Star Stand Cannot Use Beam Splitter	2 Ctns 0.23CBM 49Kgs	Ear, Nose, Throat
	A41.1901-B	3x~12x	One Head 45°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	5 Star Stand Cannot Use Beam Splitter	2 Ctns 0.23CBM 49Kgs	Dental Gynecology Ophthalmology
	A41.1901-C	3x~12x	One Head 90°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	Table Mount Cannot Use Beam Splitter	1 Ctn 0.11CBM 15Kgs	Ear, Nose, Throat
	A41.1901-CZ	3x~12x	One Head 90°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	Pole Mount Cannot Use Beam Splitter	1 Ctn 0.11CBM 15Kgs	Ear, Nose, Throat
	A41.1901-D	3x~12x	One Head 45°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	Table Mount Cannot Use Beam Splitter	1 Ctn 0.11CBM 15Kgs	Dental Gynecology Ophthalmology
	A41.1902-C	3x~12x	One Head 90° Beam Splitter C-Mount	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	5 Star Stand Optional: Teach Head SLR Camera Mount	2 Ctns 0.26CBM 59Kg	Ear, Nose, Throat
	A41.1902-D	3x~12x	One Head 45° Beam Splitter C-Mount	Manual Step 0.6x, 1x, 1.6x	F=200mm F=300mm	F=400mm	Coaxial Light	5 Star Stand Optional: Teach Head SLR Camera Mount	2 Ctns 0.26CBM 59Kg	Dental Gynecology Ophthalmology
	A41.1903	4.8x~16x	One Head 0-180°	Manual Step 0.6x, 1x, 1.6x	F=200mm F=250mm	F=300mm F=400mm	Coaxial Light	5 Star Stand Beam Splitter Teach Head SLR Camera Mount	2 Ctns 0.26CBM 59Kg	Ear, Nose, Throat Dental Gynecology Ophthalmology
	A41.1940	2x-30x	Dual Head	Motor Zoom 1:6	F=200mm	F=175mm F=250mm F=300mm F=350mm F=180~300mm	Coaxial Light	8 Direction Foot Switch X/Y/Z/Zoom Beam Splitter C-Mount	164Kgs	Orthopedics Hand & Chest Burn & Plastic Andrology Gynecology Genitourinary Animal Anatomy
	A41.1941	6x10x16x	Dual Head	Manual Step 0.6x, 1x, 1x, 1.6x	F=200mm	F=175mm F=250mm F=300mm F=350mm F=180~300mm	Coaxial Light	2 Direction Foot Switch X/Y Beam Splitter C-Mount	117Kgs	Orthopedics Hand & Chest Burn & Plastic Andrology Gynecology Genitourinary Animal Anatomy

Picture	Cata. No.	Total Magnification	Head C-Mount	Body Magnification	Standard Objective	Optional Objective	Light Source	Stand Foot Switch Optional	Package	Application
	A41.1942	6x10x16x	Dual Head	Manual Step 0.6x, 1x, 1x, 1.6x	F=200mm	F=175mm F=250mm F=300mm F=350mm F=180~300mm	Coaxial Light	6 Direction Foot Switch X/Y/Z 3 Heads Beam Splitter C-Mount	107Kgs	Orthopedics Hand & Chest Burn & Plastic Andrology Gynecology Genitourinary Animal Anatomy
	A41.1950	3x~16x	Dual Head Beam Splitter	Motor Zoom 3x~16x	F=300mm	F=175mm F=200mm F=250mm F=350mm F=180~300mm	Coaxial Light	8 Direction Foot Switch X/Y/Z/Zoom C-Mount	164Kg	Neurosurgery Brain Surgery Ear, Nose,Throat
	A41.1951	2x~12.5x	One Head 90°	Manual Zoom 2x~12.5x	F=300mm	F=175mm F=200mm F=250mm F=350mm F=180~300mm	Coaxial Light	2 Direction Foot Switch X/Y Beam Splitter C-Mount	107Kgs	Neurosurgery Brain Surgery Ear, Nose,Throat
	A41.1952	2x~12.5x	Dual Head	Manual Zoom 2x~12.5x	F=300mm	F=175mm F=200mm F=250mm F=350mm F=180~300mm	Coaxial Light	2 Direction Foot Switch X/Y Beam Splitter C-Mount	107Kgs	Neurosurgery Brain Surgery Ear, Nose,Throat
	A41.3400	4-24x	One Head 30-90°	Motor Zoom 4x~24x	F=200mm	F=175mm F=250mm F=350mm	6°+0° Coaxial	8 Direction Foot Switch X/Y/Z/Zoom	2 Cartons 0.418CB M 87Kg	Ophthalmology
	A41.3401	4.6x~27x	Dual Head	Motor Zoom 4.6x~27x	F=200mm	F=175mm F=250mm F=350mm	6°+0° Coaxial 20° Oblique	8 Direction Foot Switch X/Y/Z/Zoom	5 Cartons 0.756CB M 215Kg	Ophthalmology
	A41.3402	4x-25x	Dual Head	Motor Zoom 4x-25x	F=200mm	F=175mm F=250mm F=350mm	6°+0° Coaxial 20° Oblique Slit Lamp	8 Direction Foot Switch X/Y/Z/Zoom	5 Cartons 0.786CB M 213Kg	Ophthalmology
	A41.3403	5.3x8x12x	One Head 45°	Manual Step 5.3x8x12x	F=200mm	F=175mm F=250mm F=350mm	6°+0° Coaxial	2 Direction Foot Switch X/Y	1 Carton 0.2CBM 41Kg	Ophthalmology
	A41.3404	6x10x16x	One Head 45°	Manual Step 6x10x16x	F=200mm	F=175mm F=250mm F=350mm	6°+0° Coaxial	Table Mount & Working Table	2 Cartons 0.283CB M 61Kg	Ophthalmology Ear, Nose,Throat Surgery Gynecology
	A41.3405	2.7x-25x,	Dual Head Teach Head Beam Splitter C-Mount	Manual Step 5 Levels	F=200mm F=250mm F=350mm	F=175mm	6°+0° Coaxial 25° Oblique Slit Lamp Red Reflect For Cataract	6 Direction Foot Switch X/Y/Z	5 Cartons 0.727CB M 210Kg	Ophthalmology Cataract Surgery Surgery

# A41.3405

Operating Microscope, Ophthalmology, Hand & Orthopedic Surgery

OPTO-EDU



2 People 2 Binocular Head, Assistant Head Can Rotate To Opsite Position Of Main Head  
Main Body With Built-in Beam Splitter Can Connect CCD Camera & Teaching Head  
Equiped With 3 Objectives F=200mm/250mm/350mm Eyepiece 12.5x/18mm  
Main Microscope Magnification 2.7x-25x, Assistant Microscope Magnification 4.2x-16x, W.D.190-290mm  
6°+0° Coaxial Illumination  $\geq 50000$ Lux, 25° Oblique Illumination  $\geq 45000$ Lx Can Work As Split Illumination

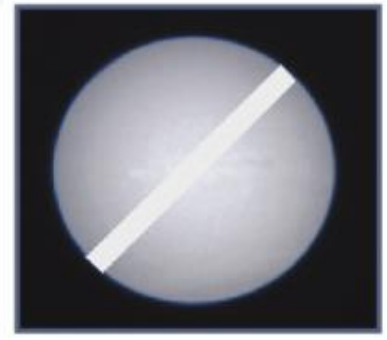
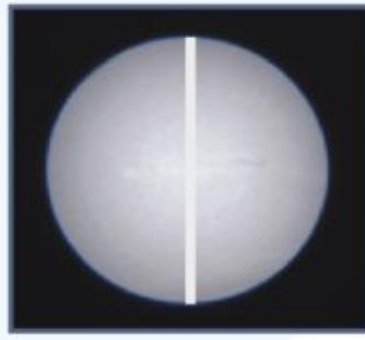


Assistant microscope can be rotated to opponent microscope





Equipped with three different objective lenses(f200/f250/f300) and applicable in ophthalmic surgery, orthopedic surgery and hand surgery.



Oblique illumination can also be used as slit illumination and slit width is adjustable.

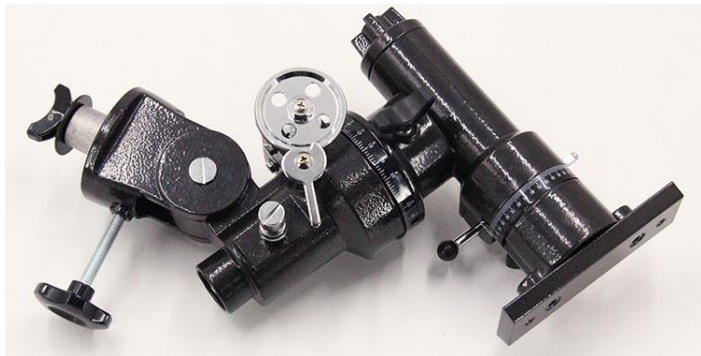
### A41.3405 Operating Microscope, Ophthalmology, Hand & Orthopedic Surgery

Head	2 People 2 Binocular Heads Main Body With Built-in Beam Splitter Can Connect CCD Camera & Teaching Head
Eyepiece Magnification	12.5×/18mm
Magnification For Main Microscope	F200: 4x, 6x, 10x, 16x, 25x F250: 3.2x, 5x, 8x, 12.8x, 20x F300: 2.7x, 4.2x, 6.7x, 11x, 17x
Magnification For Assitant Microscope	F200: 6x, 10x, 16x F250: 5x, 8x, 12.8x F300: 4.2x, 6.7x, 11x
Working Distance	190-290mm
Diopter Adjustment	±7D
Pupil Distance	50mm-75mm
Illumination Source	12V/100W,Cold Reflection Halogen Lamp For Medical Use
Illumination Type	6°+0° Coaxial Illumination Of Cold Light Source, 25° Oblique Illumination (It Can Be Used As Slit Illumination) Slit Width Is Adjustable, And It's Angle Is 360° Rotation
Coaxial Illumination	≥50000lx
Oblique Illumination	≥45000lx
Reaching Radius Of Arm	1040mm
Adjustable Vertical Range	850mm ~ 1350mm
Fine Focusing Speed And Range	≤2mm/s, ≥50mm
Speed For X/Y And Range	≤2mm/s, 50mm×50mm
Input Voltage	AC220V±22V/50Hz±1Hz, AC110V±11V/60Hz±1Hz
Power	330VA
Fuse	AC250V T4.0A , AC1250V T8.0A
Electrical Safety Standard	Executive Standard:GB9706.1-2007,Type I
Packing Volume	0.727m <sup>3</sup> , 5 Cartons
Total Weight	210Kg

# T11.1509

## Telescope, F750, D150

**OPTO-EDU**



Reflect Telescope Equatorial Newtonian Reflector Aperture 150mm (6")  
 Focal Length: 750mm Finderscope 6x30  
 Standard Eyepiece Dia.31.7mm PL6.5mm PL25mm  
 With Moon Filter, Sun Filter, 2x Barlow Lens, EQ3 Equatorial  
 Telescopic Aluminum Tripod, Color Box Packing

### T11.1509 Telescope, F750, D150

Objective Mirror	Concave Mirror, Hard-coated
Lens Clear Aperture	150mm
Focal Length	750mm
Resolving Power	0.93"
Faintest Discernible Stars	12M
Magnification	30x, 115x
Eyepiece	PL6.5mm, PL25mm
Sight Scope	6x30mm
Mount	Equatorial
Tripod	Aluminum
Accessories	Moon Filter(31.75mm), Flexible Cables(Two Pieces), Balance Weight, Accessory Tray, New 2x Barlow Lens
Focusing	Rack And Pinion Focusing
Tube Length	645mm
Total Wight	17.8kg

Eyepiece	Magnification	Exit Pupil Aperture	Brightness	Visual Field	
				Actual	Apparent
PL25mm	30x	5mm	25	1°36'	40°
PL6.5mm	115x	1.5mm	2.25	26'	41°

# T11.1510

## Telescope, F700, D76

**OPTO-EDU**



Reflect Telescope Reflector Aperture 76mm (3")  
 Focal Length 700mm Finderscope 5x24  
 Eyepiece Dia. 24.5mm SR4mm, H12.5mm, H20mm  
 With 2x Barlow Lens  
 Telescopic Aluminum Tripod, Color Box Packing



Eyepiece: SR4mm H12.5mm H20mm(0.965")  
 2X Barlow Lens  
 Used To Observe Various Celestial Bodies

### T11.1510 Telescope, F700, D76

Type	Refractor
Lens Clear Aperture	76mm(3")
Focal Length	700mm(f/9)
Eyepiece	SR4mm, H12.5mm, H20mm(0.965"), Dia.24.5mm
Finder Scope	5x24mm
Accessories	2x Barlow Lens
Equatorial	AZ Mount
Tripod	Adjustable Aluminum Tripod
Focusing	Rack And Pinion Focusing
Tube Length	645mm
Total Wight	17.8kg
Package	91.5x21.5x25cm Color Box, 4 pcs/Carton Size 75x49x53mm, Weight 24/22Kg



# T11.1511

Telescope, Refraction, F400, D70

**OPTO-EDU**



Refraction Telescope Lens Aperture 70mm  
Focal Length 400mm  
Finderscope 5x24, With 45° Erect Prism  
Eyepiece: Dia.31.7 K6mm, K25mm  
Telescopic Aluminum Tripod With Color Box Packing



Eyepiece Dia.31.7 K6mm, K25mm  
Used To Observe Various Celestial Bodies



## T11.1511 Telescope, F400, D70

Type	Refractor
Lens Clear Aperture	70mm (2.75")
Focal Length	400mm
Eyepiece	K6mm, K25mm(1.25"), Dia.31.75mm
Finder Scope	5x24mm
Prism	45° Correct Image Prism Diagonal
Tripod	Adjustable Aluminum Tripod
Focusing	Rack And Pinion Focusing
Tube Length	645mm
Total Wight	17.8kg
Package	22x11x46cm Color Box, 5 pcs/Carton Size 47x24x57mm, Weight 9.2/8.2Kg

# T11.5606

Telescope, Refraction, F360, D60

**OPTO-EDU**



Refraction Telescope Lens Aperture 60mm  
Focal Length 360mm, Barlow Lens 1.5x  
Finderscope With 45° Erect Prism  
Eyepiece: Dia.31.7 H20mm, H6mm  
Telescopic Aluminum Tripod With Color Box Packing



## Product Specification

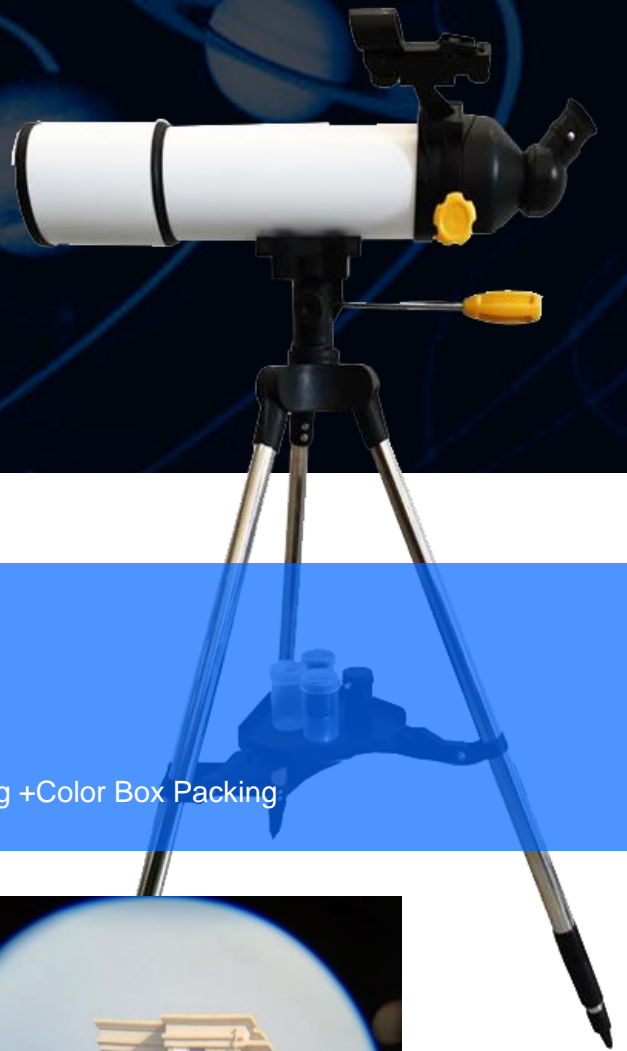
### T11.5606 Telescope, Refraction, F360, D50

Type	Refraction
Lens Clear Aperture	50mm
Focal Length	360mm
Eyepiece	Dia.31.7 H20mm, F6mm
Accessories	Finderscope
	45° Erect Prism
	Barlow Lens 1.5x
	Telescopic Aluminum Tripod
	Color Box Packing

# T11.5607

Telescope, Refraction, F500, D70

**OPTO-EDU**



Refraction Telescope Lens Aperture 70mm  
Focal Length 500mm, Barlow Lens 3x  
Red Point Finderscope With Erect Image  
Eyepiece: Dia.31.7 H4mm, H20mm, F10mm  
Telescopic Stainless Steel Tripod With Carrying Bag +Color Box Packing



**T11.5607**  
Observation Effect Real Shot

## Product Specification

### T11.5607 Telescope, Refraction, F500, D70

Type	Refraction
Lens Clear Aperture	70mm
Focal Length	500mm
Eyepiece	Dia.31.7 H4mm, H20mm, F10mm
Accessories	Red Point Finderscope
	Erect Image
	Barlow Lens 3x
	Telescopic Stainless Steel Tripod
	Carrying Bag +Color Box Packing



# T11.5610

## Telescope, Refraction, F300, D70

**OPTO-EDU**



Refraction Telescope Lens Aperture 70mm  
 Focal Length 300mm, Barlow Lens 1.5x, 3x  
 Finderscope With Diagonal Mirror  
 Eyepiece: Dia.31.7 H20mm, H8mm, F12mm  
 Telescopic Aluminum Tripod With Color Box Packing



Tripod



Finderscope



1.5X Erecting Eyepiece  
Barlow lens 3X



Diagonal Mirror



Eyepiece set



## Product Specification

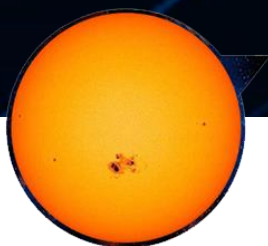
### T11.5610 Telescope, Refraction, F300, D70

Type	Refraction
Lens Clear Aperture	70mm
Focal Length	300mm
Eyepiece	Dia.31.7 H20mm, H8mm, F12mm
Accessories	Finderscope
	Diagonal Mirror
	Barlow Lens 1.5x, 3x
	Telescopic Aluminum Tripod
	Color Box Packing

# T11.5611

Telescope, Refraction, F400, D70

**OPTO-EDU**



Refraction Telescope Lens Aperture 70mm  
 Focal Length 300mm, Barlow Lens 3x  
 Finderscope With Diagonal Mirror  
 Eyepiece: Dia.31.7 K10mm, K25mm  
 Telesc



Tripod



Finderscope



Barlow lens 3X



Diagonal Mirror



K10 mm



K25 mm

Eyepiece set



Smartphone Adapter

## Product Specification

T11.5611 Telescope, Refraction, F400, D70		A	B
Type	Refraction	•	•
Lens Clear Aperture	70mm	•	•
Focal Length	400mm	•	•
Eyepiece	Dia.31.7 K10mm, K25mm	•	•
Accessories	Finderscope	•	•
	Diagonal Mirror	•	•
	Barlow Lens 3x	•	•
	Telescopic Aluminum Tripod	•	•
	Knapsack Carrying Bag	•	
	Hand Carrying Bag		•

# A63.7069

Tungsten Filament Scanning Electron Microscope, Std. SEM,  
6x~60000x

OPTO-EDU



6x~600000x Tungsten Filament Scanning Electron Microscope, Std. SEM  
Upgradeable LaB6, X-Ray Detector, EBSD, CL, WDS, Coating Machine And Etc.  
Multi Modification EBL, STM, AFTM, Heatign Stage, Cryo Stage, Tensile Stage, SEM+Laser And Etc.  
Auto Calibration, Auto Faulty Detection, Low Cost For Maintain & Repair  
Easy & Friendly Operation Interface, All Control By Mouse In Windows System

## A63.7069 Tungsten Filament Scanning Electron Microscope, Std. SEM

Resolution	3nm@30KV(SE); 6nm@30KV(BSE)	
Magnification	Negative Magnification: 6x~300000x; Screen Magnification: 12x~600000x	
Electron Gun	Tungsten Heated Cathode-Pre Centered Tungsten Filament Cartridge	
Accelerating Voltage	0~30KV	
Lens System	Three-level Electromagnetic Lens (Tapered Lens)	
Objective Aperture	Molybdenum Aperture Adjustable Outside Vacuum System	
Specimen Stage	Five Axes Stage	
Travel Range	X(Auto)	0~80mm
	Y(Auto)	0~60mm
	Z(Manual)	0~50mm
	R(Manual)	360°
	T(Manual)	-5°~90°
Max Specimen Diameter	175mm	
Detector	SE: High Vacuum Secondary Electron Detector (With Detector Protection)	
	BSE: Semiconductor Four Segmentation Back Scattering Detector	
	CCD	
Modification	Stage Upgrade;EBL;STM;AFM;Heating Stage;Cryo Stage;Tensile Stage;Micro-nano Manipulator;SEM+Coating Machine;SEM+Laser	
Accessories	CCD,LaB6,X-Ray Detector(EDS),EBSD,CL,WDS,Coating Machine	
Vacuum System	Turbo Molecular Pumps;Rotation Pump	
Electron Beam Current	10pA~0.1μA	
PC	Customized Dell Work Station	



# A63.7080

## Schottky Field Emission Gun Scanning Electron Microscope Std FEG SEM, 15x~500000x

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15x~500000x Schottky Field Emission Gun Scanning Electron Microscope  
E-Beam Acceleration With Stable Beam Current Supply Excellent Image Under Low Voltage  
Non Conduction Sample Can Be Observed Directly No Need To Be Sputtered In Low Voltage  
Easy & Friendly Operation Interface, All Controlled By Mouse In Windows System  
Large Sample Room With Five Axes Eucentric Motorized Stage Large Size, Max Specimen Dia.175mm

### A63.7080 Schottky Field Emission Gun Scanning Electron Microscope Pro FEG SEM

Resolution	1.5nm@15KV(SE); 3nm@20KV(BSE)	
Magnification	15x~500000x	
Electron Gun	Schottky Emission Electron Gun	
Electron Beam Current	10pA~0.3μA	
Accelerating Voltage	0~30KV	
Vacuum System	2 Ion Pumps, Turbo Molecular Pump, Mechanical Pump	
Detector	SE: High Vacuum Secondary Electron Detector (With Detector Protection)	
	BSE: Semiconductor Four Segmentation Back Scattering Detector	
	CCD	
Specimen Stage	Five Axes Eucentric Motorized Stage	
Travel Range	X	0~80mm
	Y	0~50mm
	Z	0~30mm
	R	360°
	T	-5°~70°
Max Specimen Diameter	175mm	
Modification	EBL;STM;AFM;Heating Stage;Cryo Stage;Tensile Stage;Micro-nano Manipulator;SEM+Coating Machine;SEM+Laser Etc.	
Accessories	X-Ray Detector(EDS),EBSD,CL,WDS,Coating Machine Etc.	

# A63.7081

## Schottky Field Emission Gun Scanning Electron Microscope Pro FEG SEM, 15x~800000x

OPTO-EDU



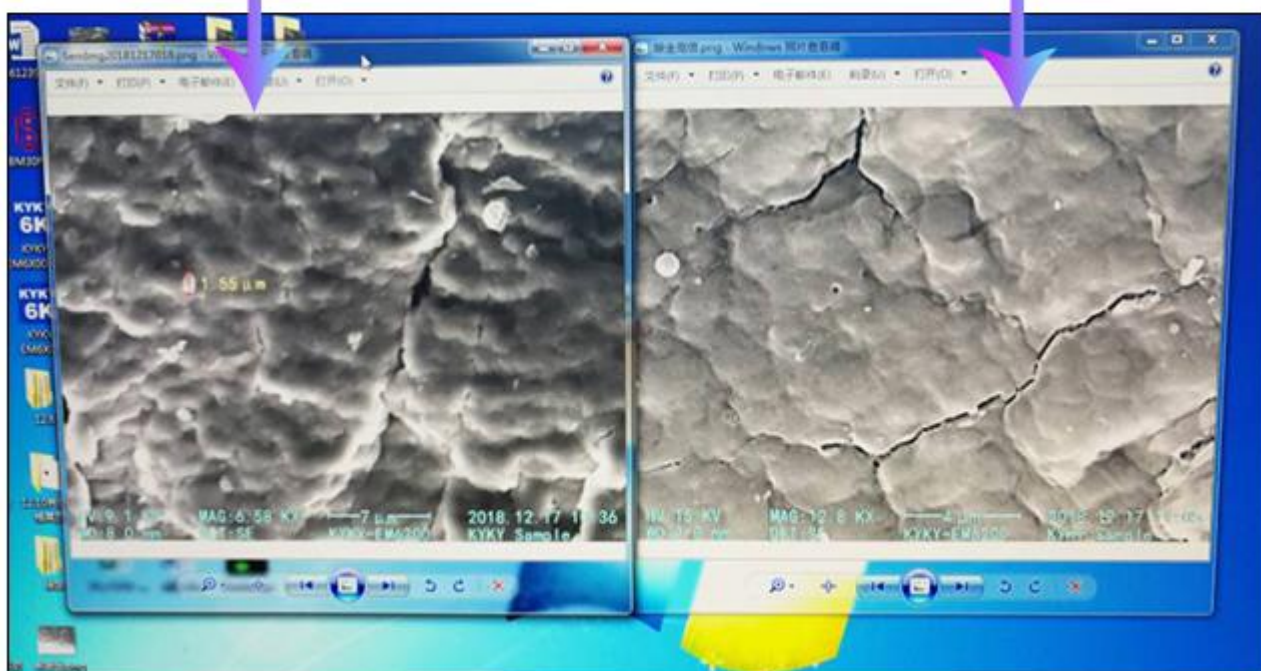
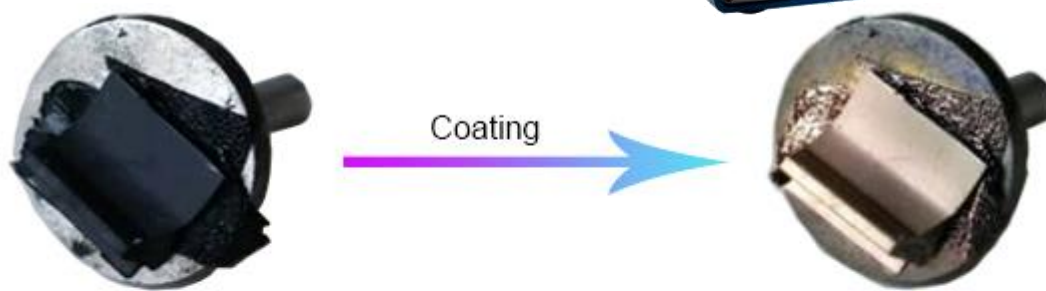
15x~800000x Schottky Field Emission Gun Scanning Electron Microscope  
E-Beam Acceleration With Stable Beam Current Supply Excellent Image Under Low Voltage  
Non Conduction Sample Can Be Observed Directly No Need To Be Sputtered In Low Voltage  
Easy & Friendly Operation Interface, All Controlled By Mouse In Windows System  
Large Sample Room With Five Axes Eucentric Motorized Stage Large Size, Max Specimen Dia.320mm

### A63.7081 Schottky Field Emission Gun Scanning Electron Microscope Pro FEG SEM

Resolution	1nm@30KV(SE); 3nm@1KV(SE); 2.5nm@30KV(BSE)	
Magnification	15x~800000x	
Electron Gun	Schottky Emission Electron Gun	
Electron Beam Current	10pA~0.3μA	
Accelerating Voltage	0~30KV	
Vacuum System	2 Ion Pumps, Turbo Molecular Pump, Mechanical Pump	
Detector	SE: High Vacuum Secondary Electron Detector (With Detector Protection)	
	BSE: Semiconductor Four Segmentation Back Scattering Detector	
	CCD	
Specimen Stage	Five Axes Eucentric Motorized Stage	
Travel Range	X	0~150mm
	Y	0~150mm
	Z	0~60mm
	R	360°
	T	-5°~75°
Max Specimen Diameter	320mm	
Modification	EBL;STM;AFM;Heating Stage;Cryo Stage;Tensile Stage;Micro-nano Manipulator;SEM+Coating Machine;SEM+Laser Etc.	
Accessories	X-Ray Detector(EDS),EBSD,CL,WDS,Coating Machine Etc.	

# A50.7011 Ion Sputtering Coater

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## A50.7011 Ion Sputter Coater

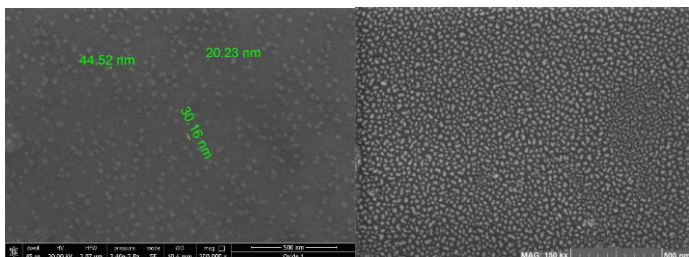
Vacuum Chamber	Dia 100mm*H130mm
Specimen Stage	Dia 40mm(Hold 6 Specimen Cups)
Gold Sputtering Target	Dia 58mm*0.12mm(thickness)
Vacuum Gauge	Pirani Gage
Vacuum Pump	Rotation Vane Pums: 2L / s
Vacuum Protection Point	20Pa With Microscale Inflation Valve
Working Gas	Argon or air with argon gas special air inlet and gas regulating in microscale
Sputtering Voltage	1.6KV
Gross Weight	48kg
Compliance	CE



# A50.7042

## Ion Sputter Coater & Evaporation Coater

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Application 1: Sample preparation for SEM. Deposit Nano film (several nanometers to tens of nanometers) on non-conductive sample surface in order to make it conductivity, Inhibit the discharge phenomenon caused by charge accumulation, improve the observation effect of SEM.

Application 2: Sample preparation of electrode. Deposit tens of nanometers film on non-conductive sample surface and use it as electrode.

Scope of application: All samples because of no thermal damage.

Parameters	A50.7042
Sputter head:	planar magnetron
Vacuum chamber:	(O.D.) $\phi 125 \times 130$ mm/ (I.D.) $\phi 108 \times 130$ mm
Material of chamber:	High silicon boron glass
Sample table size:	$\phi 64$ mm
Target size:	$\phi 57 \times 0.12$ mm
Sputter target:	Au、Pt、Ag、Cu、Pd、Au-Pd
Vacuum pump:	Rotary vane pump
Pump speed:	1.1L/s (50Hz)
Sputter current:	5-45mA, minimum step is 1mA
Sputter time:	1-999s, minimum step is 1s
Ultimate pressure:	< 1Pa
Vacuum gauge:	Pirani gauge
Other features:	(1) Built in operation wizard, which means no need for training (2) replace sputter target quickly (3) very easy to adjust the height of sample plate (4) Automatic protection of over current and over vacuum (5) Software and hardware interlock to ensure safety
Interface:	5-inch color touch screen
Operation:	Automatic

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